BATOD

British Association of Teachers of the Deaf

MAGAZINE • May 2010 • ISSN 1336-0799 • www.BATOD.org.uk

Conference 2010

Communicating clearly together

Pre-school support group

Researching numeracy skills of deaf learners

European partnership exploring ToD competencies

Join BATOD to get THE Magazine for professionals working with deaf children

Contents

From your editor

Ann Underwood, the out-going President, and her team excelled themselves this year in arranging such a wealth of workshops and a stimulating keynote presentation for this year's Conference. The Conference took place at St Cecilia's School in Wandsworth and was a joint event with colleagues from the Royal College of Speech and Language Therapists (RCSLT).

In 2007 BATOD and RCSLT completely revised the protocol for Teachers of the Deaf and speech and language therapists working together (to be found on our website in Articles >> Guidelines) so it seemed very apposite that the theme of the Conference should be 'communicating clearly together', and the opening keynote speech and workshops highlighted different aspects of this.

Many of the articles in this Magazine have been written by the workshop leaders and cover issues such as phonological awareness, accelerated reading, joint assessment, working together and breaking the news. Some have been adapted as a result of what was discussed during the workshops on the day. The leading article by Bencie Woll considers brain imaging research showing what happens when people engage in both spoken and signed communication.

The Magazine also contains the incoming President's inaugural address. Gary Anderson took over the office at the AGM on Saturday 13 March and his theme was 'stronger together'.

As usual we would be delighted to receive any letters or articles which are stimulated by anything in this Magazine. Topics for future Magazines can be found on our website. As you know, we welcome articles on the chosen theme but also on any other aspect of the education of deaf children and young people.

Paul A. Simpson

Magazine editor

Communicating clearly together

General features

Regulars

Association business

Need to contact BATOD about other matters?

Talk to Executive Officer Paul Simpson
email: exec@BATOD.org.uk answerphone/fax
0845 6435181

Cover picture
Images from the BATOD Conference 2010, taken by Arnold Underwood

For information on advertising rates see www.BATOD.org.uk

Stronger together

As the in-coming President of BATOD, **Gary Anderson** addressed the conference delegates in March and outlined his vision for the Association's future

My first duty is to thank our out-going President, Ann Underwood. In addition to her two-year term of office, Ann will have been familiar to you as former Secretary and Magazine Editor. One of Ann's strengths has been the total commitment she has brought to her roles. She has given generously of her time to the Association and for that alone we are most grateful.

I am only too conscious of the great privilege and honour it is to hold this role, and in assuming the badge of office I am reminded of other great names who have gone before me wearing it – Alison Weaver, Pauline Hughes. I will endeavour to do the best job I can over the next two years to serve the Association and its members. Even though I have had two years to prepare for this moment, suddenly it has arrived, with all its excitement and possibilities as well as the realities and challenges. At the outset I would like to thank everyone for the good wishes I have received and I know that I will only be able to fulfil this role with that support, particularly from the hard-working members of NEC and especially the redoubtable Paul Simpson, formerly National Secretary, now newly designated as Executive Officer, on whom I know I will lean heavily over the next 24 months.

Having been a ToD and member of BATOD for nearly 30 years, I am more aware than ever of the significant changes that have occurred since those early days of my career as a 'boy' teacher. I am probably the last of a generation lucky enough to receive a discretionary grant to complete an end-on qualification at Manchester University and then enjoy a range of teaching experiences in a residential school for the deaf, as head of a resource base in a mainstream comprehensive, as a peripatetic teacher and then as head of a service for learners with physical and sensory needs. That seemed to be the pattern and the norm then. How things have changed!

One thing that has certainly changed, particularly in the last ten years, is the raft of legislation, especially that which has enshrined in law the rights and entitlements of those with SEN and disability. While at times the inclusion and standards debates have not always been comfortable bed fellows, the agenda has kept us centre stage as ToDs.

One of the most significant recent Ofsted reports in 2006 was *Inclusion: does it matter where children are taught?* The main outcome was 'No, as long as they have access to specialist teachers and staff'. For me that resonates today more strongly than ever. Whether you are a ToD in a school for the deaf, in a specialist resource centre or a peripatetic teacher, your role is not only significant, but central to the progress of deaf children. You and I know that already, but as your in-coming President, the challenge for me is how we keep that central to the political agenda and an educational landscape that looks very different from the one I cut my teeth on at the start of the 1980s.

BATOD has to be both responsive and lead the way in ensuring that specialist teachers (and TAs and other support staff) are sufficient in number and skills to work in 21st-century schools and services. While I do not have a crystal ball to predict the future I believe that as an association we need to anticipate and respond to both current and future legislative direction. But haven't we always done that as BATOD? Yes, I guess to some extent we have, but I want to develop our profile in a more conscious way and build further on what we have started in the last two or three years. So my theme for the next two years is simply, 'stronger together'. Let me explain.

In many ways, considering we represent a low incidence disability group, BATOD more than punches above its weight. We are respected as a professional association in a number of key places and processes. Our views are sought by key stakeholders in the annual review of teachers' pay and conditions. Thanks to the work of Ted Moore over many years and more recently the excellent paper presented by the late Peter Preston, the School Teachers' Review Body acknowledges BATOD's needs. However, the debate about SEN allowances is ongoing.

The voice of BATOD is strongly represented by Paul as exam qualifications and access arrangements are constantly reviewed and updated. The sterling work of Jenny Baxter over many years to ensure that the language of examinations is modified appropriately must continue with renewed vigour as the suite of qualifications continues to diversify, particularly with diplomas and Foundation Learning accreditation becoming more widely established.

Our voice has been heard by those in government through BATOD's representations to the DCSF about the age profile and national shortage of ToDs. As a result, through our meetings with the Training and

Development Agency, additional places have been made available to train ToDs between 2009 and 2011 through the existing course providers.

These are all successful achievements, but in order further to develop and maintain our level of influence with declining numbers in the Association, it is essential that we work in greater partnership with other professionals – 'stronger together'. Let me be clear from the outset. I do not mean for us to lose our professional identity or dilute the BATOD brand. What I do mean is that with fewer people let us capitalise on the work that needs to be done by joining resources, time and energy with other professionals where appropriate. The fact that our conference was entitled 'Communicating clearly together' and was put together through collaboration with speech and language therapist (SLT) colleagues celebrates the protocols established over many years between our associations, but also reflects the close day-to-day joint working practices by ToDs and SLTs on the ground.

I guess the best example for me of recent joint working has been the work of the NATSIP, where BATOD is a key player alongside colleagues from VIEW, Sense and the voluntary organisations such as the Ewing Foundation, NDCS, RNIB and Guide Dogs. The old BATOD survey, now known as CRIDE (Consortium for Research in Deaf Education), is joining forces with the other low incidence groups to secure better data surrounding the pupils we came into the profession to teach and support.

Frankly, through our discussions with Hardip Begol at the DCSF over the last year, the department is not interested in any preciousness about the way we operate as professional bodies, but only in the 'outcomes' for pupils. And we know that the outcomes agenda will not be going away.

I believe it is equally important to be 'stronger together' for each other within BATOD. We need to build on recent work that informs us in the shape of position papers and guidance. For example, through the commissioning of Lindsey Rousseau we now have a position paper on the national perspective of ToDs, pupils and practice across the country. We have also produced guidance for ToDs on key features of effective support services when going through the inevitable local authority (LA) reorganisation processes. While there is no blueprint for how a LA should organise itself, we have sought to provide an aide-memoire for members when they face the question, 'So why do we need this service?' These papers and guidance are available for members on our website.

There is still more we can do to prepare common guidance and support for members:

- Stronger together with guidance on the design of Building Schools for the Future – not just about acoustics, but the whole learning environment which is of concern equally to our partners working with learners with visual or multi-sensory impairments.
- Stronger together to develop the datasets in a more sophisticated way to demonstrate the progression made by deaf pupils in terms of Every Child Matters outcomes.

We have recently reviewed our internal arrangements to streamline the operational activities of BATOD. There are now two fewer Steering Group meetings per year, and we are currently reviewing where we hold these and NEC meetings to reduce further the costs of keeping the show on the road. For our NEC meetings we have moved away from the previous committees to five workstream groups: Business and Administration; Continuing Professional Development; Quality Standards for Information Sharing; Partnerships – Policy and Practice; Technology for Learning.

Before the cynics among you comment that these are committees by any other name, I should explain that their purpose is to be much more flexible and responsive to current needs and developments, with the intention of having a year's programme of activities to enable NEC members to participate more fully, by playing to their strengths and skills.

And what is the overall state of the regions and nations? Well, despite a climate of more mature and reducing numbers of ToDs, in the last year we have seen the resurgence of the South West region, thanks to Wanda Garner and others. And in the past few months the formation of a new East region has been planned. So maybe the need for more local support also reflects 'stronger together'.

Being a 'half-full' person, and with all the changes I have described, I would say that the Association is in good shape. However, we will only be stronger together if we maintain a critical mass of existing and new members. I would therefore urge you to do all you can to encourage new members to join the profession. I think we sometimes forget what powerful role models we can be and I can remember as a peripatetic teacher how mainstream teachers asked in the past 'how do you become a ToD?' If every BATOD member could successfully sow the seeds and recruit a new ToD we can be assured of a stronger profession and one that can continue to provide the specialist skills, knowledge and expertise to ensure the successful inclusion of deaf pupils wherever they are educated.

Gary Anderson

The deaf brain

In her workshop at the BATOD Conference, Bencie Woll explained how research on the deaf brain is beginning to provide a new evidence base for policy and practice in relation to intervention with deaf children

This article outlines the multi-channel nature of language and reviews recent neuroscience research on sign language processing and on spoken language processing with and without sound. Issues of brain plasticity – the way in which the brain is able to adapt to different sensory and cognitive experiences – are discussed with special emphasis on first language acquisition and bilingualism.

Multi-channel communication

Human communication is essentially multi-channel. Although it is possible to communicate through the auditory components of speech alone, typically people talk face to face, providing concurrent auditory and visual input. The visual elements include facial expression, body movement and gesture. Sign language, of course, is also multi-channel; although there is no auditory component, facial expression, body movement and gesture accompany the linguistic channel.

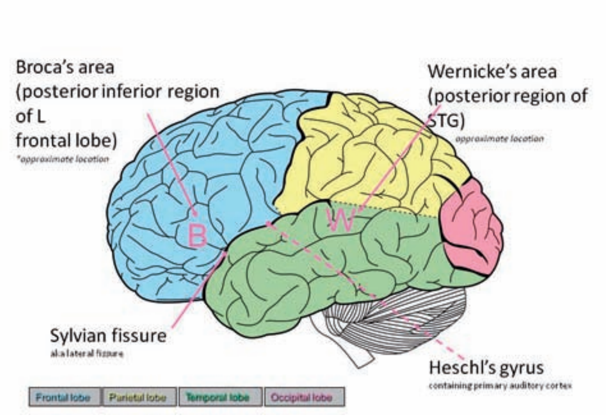
Audio-visual language processing

There is an intimate and two-way relationship between vision and hearing in processing language. The McGurk effect – when hearing (eg ‘ga’) and seeing (eg ‘ba’) two different syllables at the same time, the visual information dominates – was identified 30 years ago. More recent research by Katharina von Kriegstein and colleagues has shown that observing a silent recording of a specific person talking for as little as two minutes improves subsequent auditory-only speech recognition for that person. This improvement in auditory-only speech recognition is based on activation in the brain in an area typically involved in face-movement processing.

Such findings challenge unisensory models of speech processing because they show that, in auditory-only speech, the brain exploits previously encoded audio-visual correlations to optimise communication.

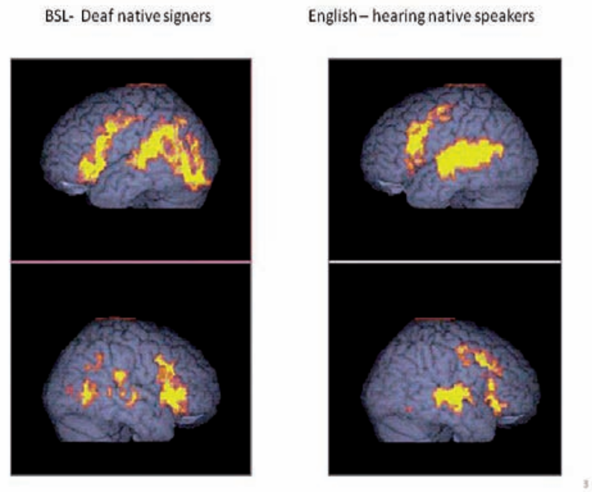
Sign language processing

Since the mid-1990s, when functional imaging of the living brain became possible, there has been increasing interest in studies looking at where in the brain language is processed. These have included studies of sign language processing to explore whether language is left-lateralised, as it is in spoken language, and also to see if classical areas of the brain involved in language processing (ie Broca’s and Wernicke’s areas – see illustration) are also utilised in sign language processing.



fMRI of BSL – Study 1

In 2002 Mairéad MacSweeney and colleagues compared BSL and English sentence processing, using groups of deaf native signers and hearing non-signers respectively. To get some match between sensory input, the English translations of the sentences were presented audio-visually.

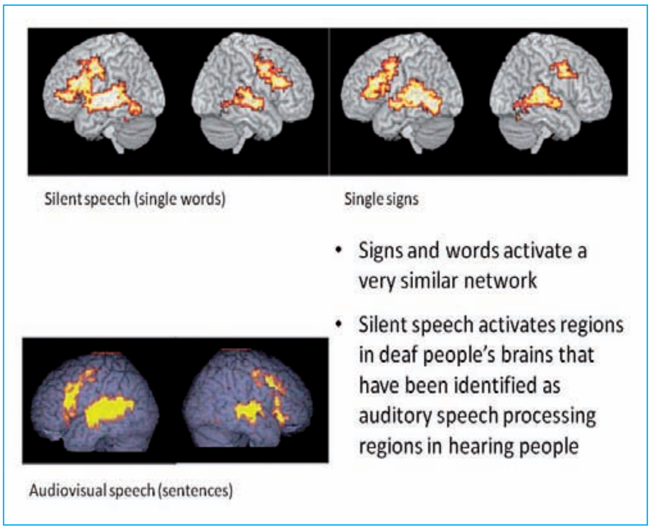


The figure above shows results for BSL on the left and English on the right. There are differences in the posterior areas of the brain – those concerned with visual processing – as even with audio-visual speech, there is far more movement in BSL. More importantly, both BSL and English are left-lateralised, and BSL processing uses the same classical language processing areas, including the secondary auditory cortex, as English.

fMRI Study 2: Comparing processing of sign, speech and silent speech

In 2008 Cheryl Capek and colleagues studied the extent to which the patterns of activation during speech perception and sign language perception differ, and the extent to which the pattern of activation during perception of silent and audio-visual speech differs, using single words and signs as stimuli.

They found that signs and words activate a very similar network, with silent speech activating regions in deaf people's brains that have been identified as auditory speech processing regions in hearing people, including the auditory cortex.



- Signs and words activate a very similar network
- Silent speech activates regions in deaf people's brains that have been identified as auditory speech processing regions in hearing people

fMRI Study 3 – Phonological processing in deaf signers and the impact of age of first language acquisition

Sign language linguists use the term 'phonology' to refer to the sub-lexical level of signs (handshape, location, movement). A study in 2008 by Daphne Waters and colleagues explored whether the term 'phonology' in signed languages has neurological as well as linguistic and psycholinguistic validity. If so, despite the surface differences between spoken language and sign language, similar neural processing should be involved in phonological analysis of signed and spoken languages. This study also addressed the effects of early sign language acquisition on phonological processing in English.

Hearing and deaf participants were asked to judge if the English words for pairs of pictures rhymed or not. Deaf participants were also asked to judge if BSL signs for pairs of pictures shared the same location.

If similar processing is required to make phonological similarity judgments about BSL and English, then the same brain areas should be recruited during both tasks.

There were 20 deaf and 24 hearing participants, matched on age and non-verbal IQ. All were good readers with a mean reading age of 15 years, 6 months. All deaf participants were born profoundly deaf; all had a mean hearing loss >92dB in the better ear over four octaves from 500–4,000Hz. The deaf group were skilled speechreaders, outperforming the hearing participants on the Test of Adult Speechreading; the hearing group were significantly better readers and had a higher English vocabulary score than the deaf participants.

The 20 deaf participants were divided into two sub-groups: 12 were native signers with deaf parents; eight had hearing parents; 18 of the 20 had attended schools where sign language was not used in the classroom. Of the eight non-native signers, five had learnt BSL after leaving secondary school; the other three had learnt BSL while at primary school.

Results show that a very similar neural network supports phonological similarity judgments in both English and BSL. We can therefore conclude that the phonological processing network involves representations that in some way 'transcend' the sensory modalities. These findings are consistent with prior research on semantic and syntactic processing, showing that modality has relatively little influence on the neural systems that support language. This is very striking in the context of phonological processing since awareness of phonology is more directly linked to sensory input, which differs for sign and speech.

Although both native and non-native signers performed equally well on the rhyme and location tasks, non-native signers required greater effort (in terms of strength of brain activation) on both rhyme and location tasks. This finding suggests that the age of first language acquisition has an impact on subsequent brain development. Limited or delayed exposure to a fully accessible language early in life has implications for the neural systems supporting not only that language, but also languages learnt subsequently, whether signed or spoken.

Auditory processing by deaf people

Reported studies have addressed the question of whether there are reliable indicators (neural, cognitive, behavioural) of individual differences in the ability to benefit from auditory prostheses in deaf and deafened people. We have already discussed research that shows that when the auditory cortex is not activated by acoustic stimulation, it can nevertheless be activated by silent speech in the form of speechreading. It has been suggested that visual-to-auditory cross-modal plasticity is an important factor limiting hearing ability in non-proficient cochlear implant (CI) users.

However, as we have seen, cross-modal activation is found in hearing as well as deaf people.

There is therefore a neurological hypothesis which suggests that the deaf child should not watch speech or use sign language, since this may adversely affect the sensitivity of auditory cortical regions to acoustic activation following cochlear implantation. Such advice may not be warranted if speechreading activates auditory regions irrespective of hearing status and if such activation may be relatively specific to such stimulation.

It is known that adults with cochlear implants present a higher visuo-auditory gain than that observed in normally hearing subjects in conditions of noise. This suggests that people with CIs have developed specific skills in visuo-auditory interaction leading to an optimisation of the integration of visual temporal cueing with sound in the absence of fine temporal spectral information.

Speechreading

Speechreading gives access to spoken language structure by eye, and, at the segmental level, can complement auditory processing, as discussed above. This does not need to be taught or learnt explicitly, since infants are highly sensitive to seen speech. Therefore it should be considered whether speechreading has the potential to impact positively on the development of auditory speech processing following cochlear implantation. Speechreading is strongly implicated in general speech processing and in literacy development in both hearing and deaf children. Speechreading capabilities interact with prosthetically enhanced acoustic speech processing skills to predict speech processing outcomes for cochlear implantees and continue to play an important role in segmental speech processing post-implant.

Conclusion

The age of acquisition of a first language impacts on brain development. The importance of early exposure to an accessible language for those born profoundly deaf cannot be overstated, as it is necessary to establish the neural networks for language, social interaction and cognitive development while maximum plasticity is available. Early learning of a sign language leads to the normal establishment of language systems (eg phonology) that can then be used to facilitate later-learnt spoken language.

The studies reported above also indicate that superior temporal regions of the deaf brain, once tuned to visible speech, can more readily adapt to perceiving speech multi-modally. These findings should inform preparation and intervention strategies for cochlear implantation in deaf children by including opportunities for natural speechreading experience.

Professor Bencie Woll is the Director of DCAL, the Deafness Cognition and Language Research Centre.

Peter Preston Award

Following Peter's untimely death, some of the family and friends of Peter Preston sent BATOD a substantial cheque to provide funding for an award in his name. The NEC decided to institute an annual award of £50 to be given for the best article on audiology written by a practitioner in the previous year's Magazine. The Technology for Learning workstream will consider all the articles written during the calendar year in the Magazine by a practitioner, and with practitioners in mind, and choose a winning article. The award will then be presented to the winner at the March AGM of the following year.

Theory of mind development

Helen Chilton (far left) and Sarah Beazley (left) report on joint working in the post-16 sector to support deaf learners as they aim to communicate in wider social and work contexts

Our workshop for the 2010 BATOD Conference explored innovative group work with deaf learners at an FE college with a strong history of multi-disciplinary collaboration. Feedback from staff and observations of student behaviours highlighted common misunderstandings between deaf learners and hearing peers/tutors, arising not through misread signs or speech but through lack of recognition of why another person might say something or behave in a certain way.

The subsequent communication breakdowns had serious implications. We were concerned that learners were not prepared for the workplace and wider social contexts. We wondered as a speech and language therapist and Teacher of the Deaf working in collaboration, what we could do.

The concept of 'theory of mind' (ToM)

Our discussions led us to the concept of 'theory of mind', generally considered in relation to children but perhaps applicable to the young adults we were observing too.

'As young children mature, they… come to understand that what they think or believe may be different from what another person thinks and believes. They also learn that much of our behaviour is motivated or caused by our knowledge and beliefs.' (*Theory of mind: language and cognition in deaf children* by B Schick, P de Villiers, J de Villiers and R Hoffmeister, 2002)

Early studies of ToM development focused on false belief tasks using puppets and dolls to see if the child could separate what she or he knew from what another thought. Research with deaf children showed that their development of ToM could be behind that of hearing peers and that native signers out-performed late signing children.

Our challenge was to find an appropriate assessment tool for older participants. We decided to use Francesca Happé's 'strange stories', which covered 12 themes, including lies, white lies, figures of speech and sarcasm.

Findings

Participants showed wide ranging responses to the questions from the stories, some performing poorly across all themes. Interestingly, the 'pretend' and 'lie' topics were understood well by all learners, whereas figures of speech, double bluffs and sarcasm were particularly difficult.

Often participants could recognise what had happened in the story but struggled to identify why the characters had spoken or behaved in a certain way. We considered contributory and co-occurring factors which might explain better the ToM skills in some students and found that participants who were most successful at answering the questions had the highest language levels, were older and had previously worked.

Intervention strategies

We set up a group with the deaf learners and, through discussion, role play and other activities, explored:

- why people say or do certain things
- how to approach social situations
- learners' communicative experiences
- individual circles of social communication.

Outcomes

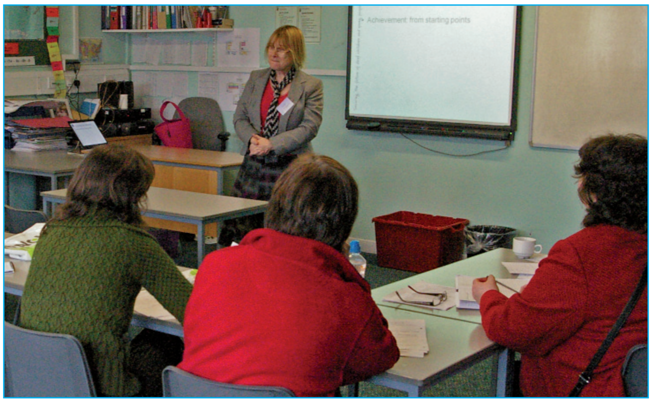
- Some learners continued to interact as before.
- Some learners gained awareness of possible strategies.
- Some learners showed understanding of these issues in the classroom but not in everyday life.
- One learner wanted scripts in order to practise conveying the right message.
- We became more aware of the difficulties learners experience and of ways we could work collaboratively around these.
- The importance of encouraging development of ToM in young deaf children was highlighted. Research into links between ToM and maternal talk may be one starting point.

The group only ran for a short time, proving that even an introduction to this topic can encourage change.

Helen Chilton is a Specialist Teacher of the Deaf within a college of further education. Sarah Beazley is an NHS consultant speech and language therapist with deaf people in Cheshire and Merseyside and a senior teaching fellow at the University of Manchester.

Evaluating your contributions

For her conference workshop, Sue Lewis explored the theme of how best to demonstrate the value added, with particular reference to language assessments



The workshop sought to explore how Teachers of the Deaf and speech and language therapists can evaluate their contributions to child achievement, secure that achievement and indeed evaluate the effectiveness of the service they jointly or individually deliver to children with hearing difficulties. Central to the discussion were two themes:

- That within the 'team around the child' concept it is neither possible nor necessary always to be able to unravel exactly who contributes what; if team contributions are effective then the child should be moving forwards overall, both in more academic achievement and in those areas of development at risk because of early childhood deafness.
- That additional support provided by the Teacher of the Deaf and/or the speech and language therapist is in place because of identified need or potential underachievement. The support and any evaluation of its effectiveness should be measured against 'bigger picture' elements (for example, language, literacy levels, learning attitudes, personal well-being, listening and attending skills) which will lay firmer foundations for such improvement and set the child up for lifelong learning, not simply against more traditional indicators such as National Curriculum levels and progression data.

Demonstrating the value added is both an effectiveness and an accountability issue and, of course, a personal integrity issue – we all want to know that what we do makes a difference. We would also like to have confidence that, given the (often limited) resources available, we have deployed these and our skills in such a way that the most difference is made, ie we have indeed facilitated the 'narrowing of the gap' that government equality and diversity policy requires us to pay attention to.

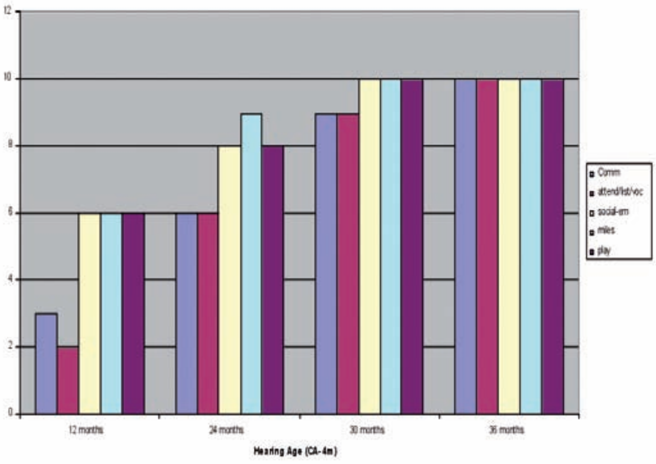
A starting point in this workshop was to agree those areas at risk because of early childhood deafness, areas that we would need to be proactive in monitoring, and how joint assessment and target setting attached to these would be linked into individualised or personal education plan targets. In addition we talked about how – if these elements were proactively supported – we would expect these to have an impact on all-round achievement and well-being. It was agreed that language and communication, including interaction, attending, listening and responding with and to others were key elements to all learning, and were intrinsically interwoven with thinking skills. Another theme explored was whether the assessments used gave the evidence that ToDs and speech and language therapists needed in order to answer the question 'what, if nothing else, must move on in the child's language/communication/learning skills if these are really to provide a sound enough basis for next steps in the child's learning and personal well-being?'

Participants were encouraged to apply the 'what, if nothing else' principle to the setting of individual education plan (IEP) targets and, if necessary, to prioritise within these. Are IEP targets identified as a result of considering all the assessments and evidence as well as the context of the child's current school/year group? Has someone 'put the bits together' so that everyone is working with the child towards common aims and targets in the short and long term? Does the IEP make clear what better progress would look like this term, and the amount of progress that would be expected in the targeted year if progress is to be considered good (or satisfactory)? Too many IEP targets are formulaic; they have a set number of IEP targets in set areas and treat symptoms rather than getting to the nub of what the child needs to do next. Consequently, although the child might achieve the IEP targets, his or her language progress overall may be inadequate.

The workshop also discussed the 'so what' element of assessment – whether joint assessment results in clear targeting of the key areas for improvement and joint working towards these with families, children and schools – and how the implementation of programmes designed to support next steps is monitored. Two examples were shared of very relevant programmes being devised for pupils who appeared to be plateauing – roles and responsibilities were defined clearly, and when the programme should be delivered and how the skills being taught could be generalised to other contexts were identified. However, at the mid-term interim review it became clear that there was little evidence of impact. Analysis of the implementation of the programme showed that in fact it had not been delivered as planned. Fire-fighting curriculum issues and a TA being withdrawn to double as a receptionist meant that for one pupil there had been insufficient time spent on supporting her priority needs. For the second pupil it became clear that the TA had had insufficient training in delivering the writing and phonics programme identified and the emphasis she was placing within support sessions was more focused on completing work than on supporting skills.

Two further aspects of value added were then explored – demonstrating progress and value added in relation to the individual and demonstrating the effectiveness of the service/role overall. Demonstrating the effectiveness of the service for the individual – has what I have advised/done made a difference and if not why not (if so, why)? – involves looking at individual child progress and achievement in key areas, particularly language. It also involves evaluating how successfully we have built capacity to use equipment and respond appropriately to children's linguistic and other levels in home and school. Finding ways of evaluating this involves the use of checklists and questionnaires. The starting point for judgements about progress was identified as how much progress should a child make within a year (if he or she is not to fall further behind and/or the gap is to be narrowed). Agreement was reached that this should mean that the child should maintain and preferably improve his or her percentile score over time on a standardised test. Where there were not such procedures available – for example, in relation to aspects of interaction and personal development or in very early development – then the yardstick should be defined very clearly in relation to developmental profiles or agreed descriptors, and moderation procedures should be in place to secure this.

One such example would be the use of the Monitoring Protocol for Deaf Babies and Children. Individual development from starting points is tracked in detail using this and its design is to facilitate each child's progress being celebrated with parents rather than as a service assessment tool. As a result the information is gathered at different ages and intervals by individual families. However, some services are now using this both to check on individual progress and rates of progress over time and then to collapse this data in terms of how many children at certain 'ages' are within one B stage of their chronological age and in which sections of the protocol. An individual child's profile can then be presented in block graph form at different ages post the fitting of aids (hearing age) and group data can then be compiled in relation to different aspects of the Monitoring Protocol – in the graph above, communication and attending, listening and vocalisation are shown. All elements of the protocol and indeed of the level 2 materials can be compared in this way across children, and service response to perceived need can be indicated.



Example: plotting progress against Monitoring protocol – individual profiles then combined to show cohort data

For older children, then, similar evaluations can be made in line with the key assessment tools identified by the service(s)/team for each age group. Such analyses will develop further to allow, for example, different aspects of key language skills to be explored. For example how good is the service at promoting narrative skills or inference skills (as measured by procedures such as ACE)? How good is it at promoting and/or laying the basis for written language skills (as identified by developmental writing profiles/National Curriculum indicators)? How effective is it at promoting particular types of reading skills?

Demonstrating value added for services and teams working with deaf children extends beyond presenting National Curriculum and progression data. It must also involve presenting data that links directly into its core activities. Evaluating effectiveness in the first instance centres on how effectively we promote language, literacy, communication, social interaction and the well-being of children, such that their access and inclusion are secured. Some examples of ways forward were discussed during the workshop – I am happy to talk with services about other ways in which this might also be developed.

Sue Lewis is currently course leader for postgraduate courses at Mary Hare/Oxford Brookes and University College of Wales, Newport. She also works independently as an inspector, adviser and consultant. The PowerPoint *presentation used as a basis for this workshop can be found on the BATOD website.*

Reading boost

Katherine Richardson describes the development of an accelerated reading programme for secondary-aged deaf pupils

We know from research that deaf children often experience considerable difficulty when learning to read. Reading skills in deaf children are often delayed when compared to same-age hearing peers. While this is often tackled at primary school, it is less common for reading skills to be developed at secondary school. This may be because it is assumed that reading development only happens at primary school age or because it is difficult to know where to start when it comes to reading skills at secondary school age.

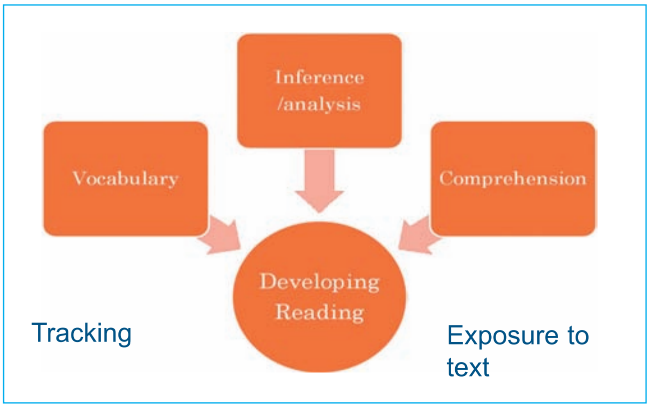
While completing my Master's degree as a specialist speech and language therapist in deafness at City University London, I became increasingly interested in literacy development in deaf teenagers. I had the opportunity to visit other schools with units for deaf children and to meet colleagues working in the same field. Furthermore, as I was based at an oral secondary school for the deaf, I was aware of how important it is for students to obtain good reading levels so that they are able not only to access the curriculum but also to achieve good results in their exams.

From this I began to look at how I could put together a programme that would expand on the current practice within the school. The idea was to trial a reading programme which could then be assessed and, if successful, shared with colleagues. I hoped that this programme would add to the current reading interventions already happening in this field.

I decided to focus on Key Stage 3 (Year 9) and started by assessing the reading ages of the students in the intervention group, using the Access Reading Test (McCarty and Crumpler). Their reading ages ranged from 8 years, 10 months to 10 years, 10 months with the majority at 9 years, 7 months. The results indicated that the reading age of the class was on average four years behind their chronological age. While I planned the structure of the reading intervention, the Teacher of the Deaf ensured that the learning outcomes of the English curriculum were also included. At the end of each session, the lesson plan was reviewed with the outcomes of the lesson added, including any progress or areas of difficulty which specific pupils were experiencing.

The success of the programme relied on the collaborative work between the speech therapist and the Teacher of the Deaf

I devised a model to help me plan the intervention programme. This came from my experience of working with secondary-aged deaf students as well as from the results of the reading assessments. From this I decided to focus on the following aspects affecting reading attainment: exam vocabulary; developing the understanding of inference; and overall reading comprehension. I also felt that it was important to work on their ability to track text visually as they read, to increase their speed and scanning skills, as well as exposing them to as many different types of text as possible. Most of the students in the class had a negative perception of reading (this



Reading intervention model for secondary-aged deaf pupils

information had been gathered in a survey) and I wanted to try and change that and allow them to engage with text in a fun and interesting way.

The aims of the reading programme were to:
1 develop understanding of exam vocabulary
2 develop visual tracking skills to improve reading fluency
3 improve understanding of inference
4 make reading fun and enjoyable
5 develop abilities to write and answer questions correctly.

The table below outlines the methods for achieving these aims:

Aim	Method
1	Introducing exam vocabulary words chosen from the list given by the examining board. The words on this list may not be modified in the exam. The 'exam vocabulary' communication workbook devised by the speech therapy team at Greenwich NHS trust was also used as a resource.
2	The resource: *Letter Tracking* by Ann Arbor Publishers (2008) was used. The activities are designed to improve visual discrimination.
3	The resource *I Say!* by Margaret Valery (2001) was used to expose pupils to inference and to encourage class discussions.
4	Fun activities included: reading short scripts and acting them out; writing out interview questions then interviewing members of the class by reading the questions; reading articles and writing up questions for a class quiz.
5	Achieved as part of the activities in Aim 4.

The lessons were given once a week instead of their free reading lesson and were generally 40–60 minutes in length. Each lesson followed a similar pattern: a structured tracking exercise, followed by a short taught piece and an activity. The homework given always related to the activity in the lesson.

At the end of the year's reading intervention, I reassessed the pupils using the same reading assessment. I compared the results with another Year 9 class who did not receive the reading intervention:

- Seven of the nine pupils in the Year 9 targeted group made eight months or more progress in a nine-month intervention period compared with four out of eight in the middle set control group.
- All nine pupils in the targeted group improved on their inference raw scores compared with only three out of eight in the middle set control group.

In addition, all pupils made progress in the speed at which they could track text. Eight of the ten targeted exam words were understood by the pupils and firmly established in formal and informal activities. Their attitude to reading also improved – they enjoyed engaging in different types of text – which was found out through a survey completed by the students at the end of the programme.

The outcomes of the reading intervention programme were very encouraging. They reinforced the fact that, through exposure to and practice in specific literacy skills, deaf secondary-aged students are able to develop further their reading skills. The success of the programme relied on the collaborative work between the speech therapist and the Teacher of the Deaf, drawing on the expertise of both professionals to ensure that the intervention was curriculum focused and relevant to the students in the class.

To date, there is very little research or information related to supporting reading development in secondary-aged deaf students. However, this does not mean that reading interventions are not happening. I hope this article will encourage you to share what you have found and/or developed so that new ideas and successful intervention programmes can continue to be added to this specialised area.

The reading programme continues to be delivered. I would like to thank the school for supporting me in this, the English department for allowing me to use the reading lessons, and Mike Marlow (ToD) and Liesl Britten (TA) who helped to facilitate the lessons.

Katherine Richardson is a speech and language therapist and head of department at Mary Hare School.

Agreed aims

Lucy Montgomery, Kate Gledhill and **Cathy Holgate** profile a workshop describing collaborative working between ToDs and speech and language therapists in Hertfordshire

In response to recent political policies and publications regarding the importance of multi-agency working, Hertfordshire Teachers of the Deaf and West Hertfordshire/North and East Hertfordshire speech and language therapists set up a working party in September 2006 to review the way the two professions worked together at a local level and to outline the way forward. Work was based around two sets of guidelines: RCSLT/BATOD guidelines on collaborative working between Teachers of the Deaf (ToD) and Speech and Language Therapists (SLT) (1991, revised 1997); and BATOD/RCSLT position paper: *Collaborative working between Speech and Language Therapists and Teachers of the Deaf* (2007).

The process

A steering group was set up consisting of SLT and ToD managers. The group agreed aims (see below), resources and a timeframe for the project. A working party was established consisting of two SLTs (one from each of the primary care trusts involved) and two ToDs (from the specialist advisory service) with the brief to meet once a term and bring back work to the steering group for managers to review. The working party aims were to:

- write protocols to formalise joint work delivered to pre-school and mainstream deaf children in Hertfordshire
- adapt these protocols to describe joint work delivered to children in the two primary school units in the county
- design leaflets (pre-school and school age) to inform parents how the two services work together.

Outcomes

Six protocols were completed:

- Information exchange/referral
- Joint working
- Hearing aids/habilitation
- Assessment and target setting
- Report writing
- Continuing professional development.

These were ratified by BATOD, put forward for a position paper with the RCSLT and rolled out to both services in 2008. In 2009, five unit protocols were completed and rolled out, and in 2010 two parent leaflets were drafted and are soon to be printed. One of the benefits of having protocols in place for professionals and leaflets available to parents is that SLT and ToD roles (and their overlap) are clearly defined. Therapists and teachers are less likely to find themselves confronting each other about who is doing what and when. The two professions present a cohesive and united front to families, and parents have clear expectations about the service each profession provides. In addition, the combined thinking of the therapist and the teacher increases the creativity around plans and solutions. SLT/ToD unit staff are also working within similar parameters so that transition for families moving from pre-school to unit provision is smooth.

The initial aims and brief were extended to include a further protocol around joint training. This includes training to be jointly delivered to others as well as training to be delivered from one profession to the other. The working party is to continue to look into collaborative working between our services and other services which families draw on, such as cochlear implant teams.

The workshop

The workshop at the BATOD Conference included a presentation of how the protocols were used to support the joint working provided to the family of a severely deaf child on her journey from diagnosis to her current placement in the Reception class of a unit for hearing-impaired children. Delegates were given time to discuss issues around the following questions:

- How are you working jointly in your area?
- What are the challenges to collaborative working?
- What are the benefits of collaborative working?
- Would you value joint working protocols for SLT/ToD services and cochlear implant centres?

Conclusion

The workshop aimed to demonstrate one example of how two professions have tried to improve their respective service using the power of collaboration. It is hoped this will give delegates the confidence and motivation to assess the stage their services' collaboration has reached with the view to moving it forward.

Lucy Montgomery is a Specialist Teacher for HI children in Hertfordshire. Cathy Holgate is a Teacher of the Deaf at Moss Bury Primary School, Stevenage, Hertfordshire and Kate Gledhill is a speech and language therapist.

CLEARVOICE™

The Clear Choice for Confident Communication

The Industry's NEWEST, MOST ADVANCED Technology for High-Performance Hearing with Advanced Bionics® Cochlear Implants

AB's revolutionary ClearVoice™ strategy, built on HiRes Fidelity 120® sound processing technology, is designed to automatically analyze and adapt to each listening situation you encounter throughout the day, separating the distracting noises from what you want to hear most—speech.

ClearVoice has been developed so that you can hear your spouse in a restaurant, your child in the car, your teacher in the classroom, or your favorite singer on the radio—without ever needing to change a program or make an adjustment to your sound processor.

Learn more about AB's cochlear implant systems and the **industry's newest, most advanced hearing technology** by calling +44 (0)12 23 84 78 88 or emailing uk@advancedbionics.com.

"When they put me in the sound booth...my old program with background noise, listening to sentences was about 40 percent. With ClearVoice, I was able to go from 40 to 88 percent. That's just a significant change!"
—**Deborah Lenihan** of Alberta, Canada, implanted at age 36

Hear the Difference

Try the online demonstration today at:

www.BionicEar.eu

You'll hear and see that ClearVoice is the clear choice for confident communication.

CI support

Julie Brinton's conference workshop considered the appropriate action to take when things aren't going as expected following cochlear implantation

Our joint understanding and experience of implanted children has grown enormously over the past 20 years since this became an accepted procedure for the severely and profoundly deaf. Indeed, the National Institute for Health and Clinical Excellence has given guidance in its *Technology Appraisal 166* that unilateral implantation is recommended for all suitable candidates and simultaneous bilateral implantation is recommended for children. However, as we see more and more implanted children in our schools, units and clinics we also come across those whose development worries us.

When should you become concerned about an individual child's poor performance and what should you do about it? At the South of England Cochlear Implant Centre we use the following guidelines for monitoring early progress with an implant:
- Lack of full-time device use by one month post implant.
- No change in vocalisation after three months of device use.
- No observed alerting to environmental sounds after three months of device use.
- No spontaneous alerting to name by six months of device use.
- No evidence of meaning derived from sound after six months of device use.
- Skills seen in audiological test situation are not reported in everyday situations.
- No comprehension of a few familiar vocabulary items by 12 months.

In order to know when a child is not performing well we have to know what should be expected at any stage. There are some published checklists and monitoring scales to match children's performance against:
- Tools for Schools (Advanced Bionics UK Ltd)
- Ears & Little Ears (MED-EL UK Ltd)
- Strive and Thrive (Cochlear UK Ltd)
- Nottingham Early Assessment Package (Ear Foundation, www.earfoundation.org.uk).

If you ascertain that the child is not doing as expected, you need to run through a hierarchy of potential problems, shown in the table below.

You will now be working with two groups of bilaterally implanted children:
- Simultaneously bilaterally implanted who may achieve binaural hearing and improved speech perception in noise.
- Previously unilaterally implanted children who are fitted with an additional contra-lateral implant.

As our experience grows with the second group of children, we have observed that they *sometimes* experience the following:
- Good aided levels with both CIs.
- CI2 sounding very different from first CI.
- Poor speech perception without lip-reading with CI2.
- Reported dizziness, tinnitus or headaches when wearing CI2.
- Discomfort when putting on CI2.
- Dislike of loud sounds with CI2 or both CIs together.

Issue	Problems	Solutions
The technology	Is the equipment working properly? Perhaps the internal device is not working?	Carry out your checks and replace anything faulty Refer back to CI centre for testing and replacement if necessary
Poor aided thresholds with CI	Mapping problems and/or inconsistent wearing of the device	Discuss with CI centre and family to improve map and regularity of wearing device
Developmental stage of child	The child has not achieved a particular milestone	The child may have an additional disability – adjust your expectations to an appropriate level
Mode of communication	The child is not learning oral language as expected Has the child got an additional language impairment?	Does the individual child require visual support in acquiring language? Consider specialist referral and multi-professional working
Poor listening conditions	Noisy environment at school	Is the child ready to use an FM system and can the school make adaptations to the environment? Consider pre- and post-tutoring

- Stopping using CI2 for some time.
- Need for extra tuning appointments to make changes to maps to make sound comfortable.
- Hearing sound but not making sense of speech with CI2 or both together.

It is important that professionals working on a day-to-day basis understand why these difficulties may occur and with good multi-agency working we can help to overcome these problems. Some suggestions which may help you to support the child include:

- Counsel the child, staff and family about realistic expectations of CI2.
- Consider intervention using 1 v 2 CIs to listen with for periods of the day.
- Put CI1 on for a short period at the start of the day before putting on CI2.
- Try 'easy listening' with CI2 – listening to a familiar story, playing favourite games or watching TV shows all with both CIs but CI2 nearest the speaker.
- Remember, improvements may take time.
- Support bilateral use sensitively – it may not be possible at first in noisy situations.

Together professionals from CI centres, local ToDs and speech and language therapists can work to improve outcomes for children with cochlear implants. Liaison is always important. Realistic but high expectations for the child should be the norm.

Julie Brinton is a speech and language therapist at the South of England Cochlear Implant Centre, Institute of Sound and Vibration Research, University of Southampton.

Life & Deaf – the sequel!

Life & Deaf brought together powerful poetry written by children in Greenwich exploring deaf identity. Life & Deaf II has now reached deaf children across the UK, as Helena Ballard reports

Many of you will remember the *Life & Deaf* book and DVD created by deaf children in the London Borough of Greenwich. The original Life & Deaf was a speech and language therapy project, which aimed to develop deaf children's self-esteem and communication in signed, spoken and written languages. In therapy sessions, the children explored their feelings about their deaf identity. They created mindmaps, discussed poetry about identity in different cultures, developed their vocabulary of emotions and wrote their own unique poetry.

The project was recognised at a local and national level for supporting the Department of Health's vision for every child to be healthy, stay safe, enjoy and achieve, make a positive contribution and achieve economic well-being. The Chief Executive of Greenwich Teaching PCT fed back, 'The poetry was truly amazing and got across the deaf identities of the teenagers more securely than a million formal papers would have done.'

Life and Deaf II retains all of the aims and aspirations of the first project. Once again, this project reflects the close collaboration between Greenwich Speech and Language Therapy Service and Greenwich Sensory Services.

After circulating the *Life & Deaf II* workbook (still available free on our website) to all heads of services for deaf children across the UK, poets from far and wide have contributed to a unique collection of poetry displayed on the Life & Deaf website. The participants each receive a certificate to congratulate them and welcome them to the Life & Deaf community! Here are some of the varied emotions expressed by the children:

Sayfullah (Year 5) thinks:

Being deaf is easy
When noisy, I can take my implant off then it's quiet.
I have deaf and hearing friends
I like joking with my deaf friends.

Charlotte (Year 6) suggests:

Deafness
If you talk too fast
I can't hear
I need to lipread
So please be near

If you want to know about deafness
You should ask me!
I am called Charlotte
Come and meet me!

If you try to sign
It helps me to know what you say
My family and friends
Then we can all play

Emma (Year 10) enthuses:

Being deaf is lucky.
Deaf people are the luckiest guys in the world!
Being deaf is wonderful
Like being a wonderful person.
Being deaf means hearing aids come in handy.
Being Deaf! Being Deaf! It's just so great!

If you'd like to see more, visit www.lifeanddeaf.co.uk/
It is not too late to submit poetry – we'd love to receive poems from the children you know! We're planning to bring some of these young deaf poets together later in 2010. There will be a selection panel comprising deaf and hearing adults and young people. The chosen poets will join us for a day in Greenwich, packed full of workshops for children to choose from, including:

- A design workshop to choose or create images to illustrate their poetry.
- A poetry translation workshop (English/BSL) with deaf and hearing poets.
- A performance workshop to be led by deaf/hearing professionals to help with the presentation of the poetry.
- A make-up and hair workshop – the chance to feel like a celebrity on camera!
- A photography workshop – capturing portraits which celebrate deafness, such as hands signing!
- A 'film shoot' in which each child can perform his or her poem in English or BSL.

The day will be brought into being by deaf and hearing professionals and young people, who will work together, providing positive role models for children across a range of careers.

Subsequently, young deaf students in Greenwich will work together to edit a short film. When this documentary film is completed, we hope to launch it at a celebratory showing at a cinema or theatre in Greenwich, with a reception for the participants and their friends and family. The film will then be distributed on DVD to all participants and will be available for a wider audience to raise deaf awareness and to encourage more children to get creative!

Helena Ballard is a Teacher of the Deaf.

Working in partnership

In their conference workshop, Antonia Aldous, Gill Tapson and Steph Halder considered the challenges of joint working on the Cochlear Implant Programme at St George's Hospital in London

The structure of the service provided by St George's Cochlear Implant Programme (CIP) is similar to that of many programmes. The concept originally came from the St George's ENT team, led by David Selvadurai, who worked closely with Sue Archbold. Sue's vast experience and wisdom were key to the development of joint protocols and systems. We also had a Teacher of the Deaf in Wandsworth, Gill Tapson, who had worked previously on an implant programme.

The structure of the programme is family orientated. Referrals come through the child's audiological physician, who carries out an assessment to affirm that the referral is appropriate for full assessment, and then scans are arranged. Each family is assigned a ToD and a speech and language therapist – this is where the structure differs markedly from other programmes, as six ToDs from Wandsworth Hearing-impaired Service are involved, along with one speech and language therapist from Christopher Place. The fact that the ToDs and speech therapist are still in the field seeing children other than those on the programme is felt to be an advantage. There are two audiological scientists attached to the programme, one of whom is the cochlear implant programme (CIP) co-ordinator, Eleanor McKendrick.

During the assessment process parents are seen by all members of the team. The SLT and audiological scientist appointments are hospital based and organised around a timetable. However, the ToD, who normally makes two visits at this point, is flexible and arranges appointments based on the child and family.

The CIP recognises that children are very different in different settings and so makes a point of gathering as much information as possible. The family is invited to a meeting with the team to discuss the assessment and is included as one of the assessors – the family's views and desires form an integral part of any decisions made.

During the habilitation phase support is co-ordinated between the ToD, SLT and audiological scientist. The SLT provides seven sessions on a fortnightly basis in the hospital, with the flexibility of extending this should the need arise. The ToD provides seven visits in the first year following implantation. Habilitation is a combination of 'hands on' and advisory. For teachers the intervals between appointments have been adapted over time in response to feedback from families, schools, nurseries and local colleagues. However, there is a basic framework of a six-month review and a year review post implant. Throughout the habilitation regular communication is maintained through hospital-based meetings. Children and young people are reviewed by the team until the day before their 19th birthday when they transfer to the adult CIP, also available at St George's.

What are the challenges in working as a team when members are from different locations? The main challenges that need to be overcome are communication, setting appointments and knowing what everyone is doing, report circulation and keeping tabs on where children are in the process. Over time we have held regular planning meetings to tease out difficulties and find solutions.

In the past we had a very small number of teachers working on the programme and fewer SLT days. There was also no administrative support in the early days, but we did all come together at monthly multi-disciplinary meetings held at St George's.

To address the challenges we increased the SLT allocation from Antonia Aldous at Christopher Place. We introduced a lead teacher – Steph Halder – to co-ordinate the teaching team. We also introduced strategic planning meetings to modify protocols and keep abreast of new developments. There is huge commitment from everyone on the team and regular meetings are held between the audiological scientist, ToD and speech and language therapist. The meetings have evolved so that the team discusses patients who have completed the assessment and are coming to the family meeting that day or children whose recent assessment indicates that they would benefit from further support.

We have also changed some aspects of our protocol:
- Visits are numbered rather than given a week number to provide increased flexibility with intervals based on the needs of each individual child and family.
- We have revised practice in line with NICE guidelines.
- We aim to be flexible to try to meet the child's needs in the best and most effective way.
- We have expanded the administrative support to ensure that everyone is kept in the loop.

We are constantly looking forward and are still working on a number of issues, including the hospital-based IT systems and access to data. We are also trying to improve ways in which local colleagues and parents can access us.

Current planning includes:
- creating user-friendly guides to help families and local colleagues know what our roles are and what we provide
- increasing our training to colleagues and families
- setting up a family support group
- expanding audiology.

In summary, the partnership is underpinned by clarity, joint planning and development but, above all, a shared vision of placing the child and family at the heart of all we do.

Antonia Aldous is a speech and language therapist at Christopher Place, and Gill Tapson and Steph Halder are Teachers of the Deaf from the Wandsworth Hearing-Impaired Service.

Time for PUD

Helping children gain a clearer understanding of their deafness is the aim of a new programme pioneered in Rotherham. Jackie Salter and Caroline Chettleburgh have the details

As Teachers of the Deaf, we are concerned about the development of the 'whole' deaf child, not just their academic progress. Issues of identity and self-esteem are key to the development of confident young people. It is important that deaf children develop an understanding of the nature of their own deafness and how it will impact on their lives within a hearing world. This can be particularly important for children who do not have deafness in the family, and who are educated in mainstream settings.

The Rotherham Hearing Impairment Team developed the Personal Understanding of Deafness (PUD) programme over a number of years. Staff asked the question, 'What kind of information do deaf children need to know and understand in order to function independently, effectively and confidently?' Starting with a simple checklist of hearing aid maintenance skills, this was expanded to include other technologies (Strand 1) and then other strands were developed, as outlined below.

- **Strand 1: Independent management of audiological equipment** – a checklist of audiological management skills, including a range of technologies.
- **Strand 2: Knowledge of personal hearing loss** – to develop an understanding of how ears work and their own specific hearing loss.
- **Strand 3: Deaf and hearing awareness** – to develop an understanding of the differences between how deaf and hearing people communicate.
- **Strand 4: Confidence and understanding to ensure effective communication** – to develop the skills to enable them to anticipate, understand and resolve communication difficulties.

Later, a strand focusing specifically on transition was added, and matters relating to safety, particular to deafness, were embedded throughout the programme:

- **Strand 5: Transition** – to understand the particular needs their deafness brings at periods of transition.

Each strand is designed to give progression through the Key Stages and consists of a set of learning objectives rather than a whole teaching scheme of work. This is to allow flexibility, as PUD is designed to accommodate children who use a variety of aids – hearing aids, cochlear implants, BAHAs – and communication modes and who attend a variety of educational placements. It also allows different teaching and learning styles to be accommodated.

Examples of the content of the PUD programme

Example 1 – an extract from Strand 4: Confidence and understanding to ensure effective communication

Competence levels:
1 = skill introduced
2 = skill emerging
3 = skill established

	1	2	3
KS1 To ask for confirmation when they are unsure of what has been said			
KS2 To begin to develop strategies to repair a conversation (confirmation, clarification, explanation)			
KS3/4 To have the strategies and confidence to repair a conversation			

Example 2 – an extract from Strand 3: Deaf and hearing awareness

	1	2	3
KS1 To understand that hearing people do not always need to look at each other to be able to communicate			
KS2 To understand that hearing people are able to access visual and auditory information simultaneously			
KS3/4 To have the confidence to address and discuss misunderstandings that have occurred due to a lack of deaf awareness by the hearing person			

The programme could be delivered:

- individually by a peripatetic Teacher of the Deaf
- to a small group of pupils attending resourced or specialist provision
- to a small group of children attending different schools brought together on an occasional or regular basis.

In Rotherham, the peripatetic teachers use aspects of the programme on a one-to-one basis with children in mainstream schools. In the Primary Hearing-Impaired Resource, one lesson a week is set aside for PUD, where the deaf children are taught in groups: one for KS1 and one for KS2. Activities include:

- discussion
- role play
- visits and visitors
- making books and diaries
- use of the internet and IT programs
- making and watching videos.

Throughout, the aim of the PUD programme is to develop children's self-awareness, knowledge and confidence. Sessions therefore encourage open discussion and exploration of the issues, however sensitive, in a safe environment. We have found that deaf children benefit from the use of the PUD programme, they enjoy the sessions and use the knowledge and the strategies they have learnt in their everyday interactions. Parents and carers have also reported that their children are better able to discuss their deafness, communication styles, equipment needs and so on. The PUD programme will shortly be available to download from The Ear Foundation website in PDF format for a small fee.

Jackie Salter is the Education Manager at The Ear Foundation and Caroline Chettleburgh is the Hearing Impairment Team Leader with Rotherham Children and Young People's Services.

A missing link?

In their recent workshop, Rachel Rees, Gill Banham and Jacqueline Watton explored the teaching of letter–sound correspondences

Much has been written about the important links between deaf children's speechreading, phonological awareness and literacy. For example, in their article in the *Journal of Deaf Studies and Deaf Education*, *11* in 2006 ('Speech reading and learning to read: a comparison of 8-year-old profoundly deaf children with good and poor reading ability') Margaret Harris and Constanza Moreno found an association between speechreading ability, phonological awareness and literacy skills when comparing two groups of deaf children matched for age, degree of deafness and non-verbal intelligence. These findings are not surprising as awareness of how words look and sound should help deaf children to make links between parts of the spoken word and written letters. This is why teachers sensibly try to get deaf children to hear and see the differences between sounds when helping them to make links with written letters. However, this task can become difficult when the child cannot hear or see a difference between sounds (such as 's' and 't').

A further link in this process, often not discussed, is speech production. Although studies often don't find links between broad speech intelligibility categories and literacy skills, this does not mean that learning something about how a sound is produced has no connection to speech perception and literacy. In 2009 Rachel Rees conducted a study which indicated that acquiring knowledge of how a consonant is produced improved a nine-year-old deaf boy's ability to detect that consonant in spoken words in speech perception tasks. This showed that articulatory instruction had improved speechreading.

In a phonics teaching programme described and evaluated in 2005 by Beverly Trezek and Kimber Malgrem ('The efficacy of utilizing a phonics treatment package with middle school deaf and hard-of-hearing students', *Journal of Deaf Studies and Deaf Education, 10)*, teachers successfully combined articulatory instruction with the introduction of hand cues (visual phonics) and their links with written letters. A possible spin-off from combining some articulatory instruction with teaching letter–sound correspondences is an improvement in speech production. Although studies evaluating phonics teaching do not include before and after measurements of speech production, their authors sometimes comment on this spin-off. For example, in 2000, Sue Palmer ('Assessing the benefits of phonics intervention on hearing-impaired children's word reading', *Deafness and Education International, 2*) reported that a phonics package had improved the deaf children's letter–sound knowledge and reading and noted, as an aside, that the speech and language therapist of one of the children had reported an improvement in speech as a result of the phonics training.

Conference report

The conference workshop set out to explore some of these ideas and offer evidence that enhancing speechreading (through the use of Cued English) and providing additional information about speech production (through the use of tactile cues, articulatory explanation and visual phonics) can help to enrich a deaf child's awareness of the spoken form of words. A review conducted in 2008 by Ye Wang, Beverly Trezek, John Luckner and Peter Paul ('The role of phonology and phonologically related skills in reading instruction for students who are deaf and hard of hearing', *American Annals of the Deaf, 153*) suggests that visual phonics and Cued English are effective instructional tools for developing phonological knowledge, which could be the key to higher level reading skills for some deaf children. Using these tools effectively requires close collaboration between Teachers of the Deaf and speech and language therapists.

Gill Banham described how, at ERADE, teachers and therapists are striving to teach profoundly deaf students phonological awareness skills so that they can use a synthetic phonic approach to reading and spelling. Using Cued English (a system of handshapes that aids lip-reading) to help them access a phonics programme (Teaching Handwriting Reading and Spelling Skills – THRASS) the students can identify all the English consonants and vowels within words and the spelling choices representing them and can develop skills such as rhyme and syllable awareness.

Jacqueline Watton described how visual phonics (a system of hand symbols linked to the manual alphabet that provides information on speech production) can be integrated with a phonics programme (such as THRASS) to develop literacy and speech intelligibility.

Rachel Rees is a lecturer at University College London. Gill Banham is speech and language therapist at the Exeter Royal Academy for Deaf Education and Jacqueline Watton is a speech and language therapist working for Devon Primary Care Trust.

Working towards a common goal

True collaborative working places the parent at the heart of the support team, as Corinda M Carnelley and Catherine White highlighted in their conference workshop

Ask 16 professionals what is meant by collaborative working and you will probably receive more than 16 different answers. Most will imply that collaborative working means working with colleagues from other disciplines, setting joint goals and sharing information. Few definitions will include the word ‘parents’. Collaborative working is traditionally defined as *professionals* working together for the advancement of the child.

In 2007 a position paper was written by a working group of BATOD and RCSLT members entitled *Collaborative working between SLTs and ToDs.* This paper outlines the principal elements of effective co-working, including showing mutual respect, building relationships, discussing roles and sharing information. It provides an excellent model of practice for collaborative working between professionals; however, there is a fundamental flaw with this traditional model of working. Involving parents is generally acknowledged as part of good practice, but rarely are parents considered key members of the child’s support team. As a result, an expert model of care is often adopted, which only serves to heighten parents’ perception that they are no longer in control of their child’s care and that they have little of value to offer.

Professionals play a key part in re-establishing the truth that the parent is the child’s greatest expert

Establishing roles is key to the success of collaborative working. A partnership can only work when each member’s role is clearly defined and when a common goal is established. While each professional member brings a unique skill set and expertise, we all share a common goal – to help each family help their child. Professionals play a key part in re-establishing the truth that the parent is the child’s greatest expert, but what does this mean in practice?

The first step towards collaborative working is to identify the long-term goal. Most families who attend Auditory VerbalUK have a common hope – that their child will learn to listen and talk alongside his or her hearing peers and go to mainstream school. For the majority of children, this is an achievable goal.

Parent partnership is the cornerstone of true collaborative working

At Auditory VerbalUK parents are regarded as the driving force in determining their child’s care package and they play a central role in helping their child fulfil his or her potential. Each session begins with the same question, ‘What would you like to get from today’s session?’ By listening to what parents want, professionals are able to put together a package of care that is tailored to families’ individual needs and as a result parental involvement increases. Parents are coached during each session and they are given the tools they need to help their child communicate more effectively in everyday situations. ‘Take-home messages’ are generated by the parents at the end of each session. These are key ideas and techniques that they have chosen to carry over into the home and beyond. Short-term goals are set with the parent and reviewed at regular intervals. Objective measures are used to evaluate progress, and the overall effectiveness of the package of care is reviewed at parent consultations. With permission from parents, all observations, goals and reports are shared with the child’s local support team.

In conclusion, collaborative practice can only be effective when all members of the child’s support team are working towards a common goal; parent partnership is the cornerstone of true collaborative working. Professional members of the child’s support team each bring their own skill set and expertise to the child’s care package; however, the aim of every professional is essentially to help the parents help their child. This requires professionals to listen to what parents want, equip them with the tools necessary to effect change and closely monitor progress to ensure that the support package is effective for the child and parents. This practice puts parents clearly in control of their child’s care and emphasises the value they have to offer in their management.

Corinda M Carnelley is a peripatetic Teacher of the Deaf with the London Borough of Croydon and Catherine White is an auditory verbal therapist with Auditory VerbalUK.

A useful support tool

Lisa Morgan provides a brief overview of the Speech, Language and Communication Framework and explains how it can work for practitioners, managers and training providers alike

The Communication Trust is a coalition of voluntary and community organisations. Our focus is to raise awareness of the importance of speech, language and communication across the children's workforce and to ensure that the workforce is able to access opportunities to develop their skills in supporting children's speech, language and communication.

Underpinning this work, the Communication Trust developed the Speech, Language and Communication Framework (SLCF) – a clear, comprehensive framework which defines the skills and knowledge needed by the workforce to effectively support the speech, language and communication development of *all* children and young people. The SLCF was launched in 2008 and describes around 150 competences organised over four stages: universal, enhanced, specialist and extension.

The SLCF is also an interactive online tool providing practitioners with a clear route through training and continuing professional development in speech, language and communication. At www.communicationhelppoint.org.uk practitioners can complete a self-evaluation where they rate their level of confidence for relevant competences. This then provides a profile of their current confidence in supporting children's communication and highlights areas for development. Practitioners can then be signposted to relevant training and continuing professional development (CPD) opportunities to develop further their skills and knowledge in particular areas. When they feel they have transferred knowledge and skills into practice, they can update their evaluation, showing progression and increased confidence.

Managers and training providers can also use the SLCF in a number of ways. It can be used to plan and structure CPD programmes for individuals, settings or services. Where groups of staff complete the SLCF, it is possible to obtain a collated overview, highlighting areas of strength or development need within a group. The SLCF has also been used as a consistent framework by training providers to map their training – giving a clear overview of the level and content of training courses, highlighting strengths and identifying gaps either within courses or across a whole training offer.

The SLCF also fits well with a range of national and local initiatives, such as the Every Child a Talker programme and the Inclusion Development Programme Pathfinder project. It has also formed the basis for the development of new qualifications for the Children's Workforce, including forming a core unit in the new Children's Workforce diploma.

Through its development and varied applications, the SLCF provides us with a really useful tool to help with our crucial work in equipping professionals to understand and support speech, language and communication better.

For details visit www.thecommunicationtrust.org.uk or why not log on to www.communicationhelppoint.org.uk and try out the online evaluation to see how it works for you?

Lisa Morgan is a professional adviser at the Communication Trust.

A model of joint working

Terry Bailey and Wendy Martin present a profile of positive pre-school practice in north London

For over ten years now Camden and Islington speech and language therapists and Teachers of the Deaf have been working together to support pre-school deaf children and their families. Since the introduction of newborn hearing screening we have been working with younger babies and consequently the way we work together has had to adapt to meet the ever-changing needs.

The team comprises three separate services based within education and health. Camden and Islington each have an Advisory Teacher of the Deaf (ATOD) Service. The Specialist Speech and Language Service covers both boroughs.

Service provision

We provide a service to families of children aged 0–5 years who have a sensorineural or permanent conductive hearing loss. Once a baby is diagnosed with a hearing loss the family is referred directly to the ATOD service. The ATODs will then refer on to a speech and language therapist (SLT) when the family is ready to access this support.

Support is initially provided in the home with regular visits tailored to meet a family's needs. Once a child is at nursery, visits are focused on ensuring that the transition from home to nursery is smooth. Regular visits are organised to the educational setting by the ToD to ensure that all staff are confident in supporting the child, using the appropriate technology and differentiating the curriculum as required. Children with additional needs may be supported by a range of other services, such as the Child Development Team. For all children, therapy intervention and the child's package of care will be determined by the child's needs, developmental progress and the wishes of the parents, in liaison with the other professionals involved.

Teacher of the Deaf

When the ToD first meets the family of a newly diagnosed deaf child what is offered will depend on the family. Over time the advisory ToD will incorporate the following roles into their practice: adviser, counsellor, diplomat, technician, teacher and manager of staff.

Speech and language therapy

The SLT service offers a range of packages of care to meet the children's communication needs, including:

- Assessment and monitoring of communication skills
- Parent–child interaction
- Modelling of skills
- Information and advice regarding communication mode
- Specific therapy packages to target: early language listening and play skills, listening, speech and language, and communication
- Training/support to nursery staff: language groups (including social skills groups); individual support with key worker.

The therapy model includes:

- six- to eight-week blocks delivered at home or nursery
- a period of consolidation for follow-up work. Blocks can run concurrently if required or an ATOD may offer input at this time
- joint SLT and ToD visits at the beginning and end of a therapy block to ensure clear communication, goal setting with further opportunity for parental input, and review of progress
- monitoring of skills and advice at agreed intervals.

What makes it work?

The key to success is to put the children and families at the centre of our work. We aim to support parents to become confident decision makers and make informed choices for their child.

For this to be successful we need to have mutual professional respect, a positive attitude, a clear understanding of our separate roles and the flexibility to respond to the changing needs of the family. Joint visits and regular meetings allow us continually to review our input.

The model is not 'set in stone' but is part of an evolving process. We need to be able to respond to new technologies and guidelines and also to ensure that members of the team feel confident to contribute new ideas and work in their own style.

Benefits of joint working

We believe through joint working we can better meet the needs of the families. We bring different experiences, skills and perspectives to each family. We are able to share skills and knowledge and learn from each other.

We are all working to agreed goals, following discussion with the families, and through our understanding of the impact that hearing loss can have on linguistic and socio-emotional development. We endeavour to offer a consistent and co-ordinated service about which families can feel confident. Direct work with the family tends to alternate between the two teams, ensuring that we always have a keen sense of the stage of the child's progress and what specific support the family might require next.

The range of experience and local knowledge that a team of people rather than individuals brings, supports the services that can be introduced to the families, particularly at times of transition. Practically, having two people on visits can allow split time between the parents and the child to support the completion of assessments/paper work or even help to distract siblings.

And the challenges
The main challenges to working in this way tend to be time, resources and information sharing. This is particularly apparent when a family has a number of professionals involved and when the team and the family do not share a common first language. There is never enough money or time in the day.

Also, the distance across the two boroughs means that trying to develop initiatives such as stay and play groups to bring together parents from both boroughs can be difficult. We are working together on developing solutions and minimising this particular problem.

Terry Bailey is an advisory teacher for deaf children and Wendy Martin is a specialist speech and language therapist (deafness).

Combining skills for assessment

Judy Halden's workshop explored the use of developmental frameworks in assessment and asked delegates, 'Are we testing purposefully?'

In Hertfordshire, as a result of collaborative working practice stemming from the BATOD/RCSLT position paper *Collaborative working between speech and language therapists and Teachers of the Deaf* (2007), we have been carrying out an exercise to examine the formal tests that we are using. This involved thinking about why we are using them and how we might supplement or even substitute their use by creating – and therefore understanding about – developmental frameworks to support more informal methods of assessment.

The purpose of the conference workshop was to consider the following issues:

- Formal and informal assessment: the advantages and disadvantages. These were outlined in relation to the recent articles in the January 2010 issue of BATOD Magazine by Judy Halden and Sarah Beazley ('Test questions') and Wolfgang Mann and Rosalind Herman ('Where are we now?').
- The use of an assessment framework to examine what assessments we use and what they assess.
- Why an understanding of developmental frameworks is essential for the assessment and management of children on caseload.
- How the use of developmental frameworks could enhance collaborative practice.
- How the understanding and use of developmental frameworks might help us to understand how pupils might or might not be accessing the curriculum.

During the workshop delegates were given the opportunity to:

- share with each other both formal and informal assessments they are currently using
- discuss these in relation to the developmental frameworks presented.

Although we do not advocate dropping the use of formal standardised procedures, they should be treated with caution and it is necessary to think carefully about what they show and how they help to further children and young people's language development. Informal assessments are often more functional and informative than standardised tests. However, it is necessary to have an understanding of the developmental progression of different aspects of language to be confident and competent in using them. It is important to think about what other informal procedures might be used that could be more informative and then to use combined professional skills, knowledge and experience to develop these.

Combining our professional skills, knowledge and experience to research informal assessment using developmental frameworks can lead to much more enhanced collaborative practice. Most importantly, these frameworks help us all to work towards the same goals for the child, therefore reducing professional conflicts and empowering all those involved with the child's language and communication development.

Judy Halden is a ToD and specialist speech and language therapist with deaf people.

Breaking news

When families receive a diagnosis of deafness, do we always talk to them in an appropriate and helpful way? Peter Annear's workshop asked professionals to consider their reactions

Why have I left 'bad' out of the title? I could have put 'unexpected' instead. Why didn't I? From the beginning, sharing news that a child is deaf is unfamiliar territory – full of the unexpected.

Some friends of mine were expecting a baby. When I asked them if they thought their child might be deaf the response was 'We really hope so.' I was shocked – not at their response, for they were both profoundly deaf – but at my reaction. The fewer preconceived ideas we have, the better; for each time we are faced with this challenge we are with a new family; we enter a different territory with different laws, different terrain and different expectations.

Much of what follows is common sense or my own personal view (and sometimes they are one and the same!). I am also very grateful to workshop members who shared their thoughts so honestly, thoughtfully and helpfully. The summary of their comments is included after each section.

Obstacles and pitfalls

The task of breaking news is a very complex one because it requires such transparent behaviour. It requires us to examine ourselves and to try to 'stand in someone else's shoes'. If we recall times when we received news, we wanted to hear it in different ways. There will be many variations in our needs and preferences and if we were to receive a second lot of news there is no guarantee that we would want the same treatment the second time around.

We all have a 'good news, bad news' joke and most of them feature a cruel or heartless sting in the tail, which often implies this is the 'wrong' way to break news. There is no right way to break news, but there is a helpful attitude (telling jokes probably isn't part of that, but humour could be). Your successful approach in one case could be the worst approach for your next case.

Frameworks

There is no formula for breaking news, just as there is no formula for telling someone you love him or her. However, an 'attitude/expectation framework' may help the process and may include some of the following ideas (as well as many more):

- This process is likely to take time, even when you would like to get it 'sorted' in one session. A commitment to ongoing support is probably one of the most valuable things a family can have at this time.
- We can't stop the bad news from happening; however, we may be able to make it more positive.
- Saying less and listening more is a good starting point.
- When emotions are high, cognition is low and giving the family members space and time to start their journey in their own way can make a difference to whether they feel in control and to your understanding of how to respond.
- There is a need to balance empathy with sympathy.
- There is a need to recognise that our own reactions to such news may be very different from those of the family we are supporting.
- Once we can see how the family is responding we can begin to mould and form our response/support.

Workshop feedback: giving/receiving bad news
After considering a personal situation where we gave or received bad news:

- Can I give a way forward?
- I want to lessen the blow.
- Is there a professional gap we need to maintain?
- We often have to 'mop up' the badly broken news.
- A bad disclosure can mean more difficulty in moving on; it can impact on expectations and affect perception and attitude towards deafness.
- We should be aware of our language to help families' understanding – both linguistic (jargon?) and cognitive understanding (avoid 'obscure terms').
- There is never a good time.
- Do we need to withhold some information?

Case study: Billy

Billy has a diagnosis of auditory neuropathy spectrum disorder. Disclosure of diagnosis took place in a neonatal intensive care unit. This was not a good experience for Billy's mother, who made the following comments.

- I didn't feel confident in the tester.
- The test was carried out in an untidy staff room, not a proper space.
- I didn't get a proper explanation of what was going on or what to expect.
- There was no reassurance.
- I didn't feel listened to and the experience was not supportive.

Her later interactions with audiology and our Hearing

Workshop feedback: received wisdom

After looking at general advice on breaking bad news:

- You need to be in the right place in your mind.
- The immediate emotional response may be 'shutters down'.
- Be sure of your information/facts.
- Beware of bad disclosure (hit and run approach).
- Establish where they (the family) are.
- Discover their (family) language of acceptance.
- Beware of giving your opinions.
- Cultural awareness is important but sticking to the facts must be central.
- The family may need to talk repeatedly/often – contextualising is important and ongoing.
- There may be questions and a need to revisit early responses way down the line (sometimes years later).
- If we want families to move on they must be able to move 'back' too.
- Being too professional or detached can lead to barriers.
- As a professional, don't try too hard – we all make mistakes.
- Answer *their* questions.
- Don't take parental expertise away from them.

Support Team were much more positive ('Once I met Jacqui and Paul I felt much more reassured and positive') and her whole attitude to the news became more optimistic, practical and hopeful. The process continues and each home or clinic visit has an element of going over old ground and preparing for the next step.

It is good to recognise that this contextualising process (by all of us) is important for forward motion.

Workshop feedback: receiving news

After considering a case study and how we would like to have had bad news broken:

- Set the scene.
- Avoid a hit and run approach.
- Home ground is better than anywhere else.
- Can you leave quickly?
- After a very unemotional factual disclosure (by consultant/medic) it can help if this is followed up by a more emotionally supportive visit (ToD/counsellor/friend).
- There is often a need for professional counselling skills.
- It can be helpful to have more detached/objective support.
- It is hard to be equivocal when the family need is for us to be unequivocal.

Techniques and attitudes

The aim is to support the reaction (grief, surprise/shock, anger), to recognise and value it and use it as a stepping stone. It is not always helpful to try and make the family feel that it is OK after all. Do we reassure to make them feel better or ourselves?

How does this apply to our family support work as ToDs?

- As ToDs it is often not our responsibility to disclose the diagnosis of deafness to families.
- We may well witness this or we may be part of the initial disclosure or, more likely, we will be with the family within 24 hours of the disclosure.
- At this point we may need to rebreak the news, trying to deal with grief, anger and confusion.
- More often now the team around the child model is being used. Have we found this to be useful in our own experience?
- What are the issues for us and how do we resolve them?

Workshop feedback: advice to colleagues

At the end of the workshop

- Consider sensitivity, location, relationship.
- When with the family after news has been broken: listen to the family; be there when they need you; accept them as they are.
- Observe what is before you and work from there; have a wealth of information in the boot of your car – you never know which questions parents will want answering when.
- Be sensitive to what parents want from you.
- 'Read' the parents – take your lead from them.
- Be yourself – do what feels natural to you.
- Don't think they necessarily want to be treated as you do.
- Listen, be honest, clear and patient.

Conclusions

One of the main and recurring points that arose was that before we do anything we need to find out where families are and how they function. Only then *may* our support and interactions be useful.

Another area of agreement was the need for families to 'stay central, in control, the experts'. Often in our desire to do our job we jump in too early, too enthusiastically, with too much commitment, leaving the family breathless and resentful of what we seem to be able to 'do' with their child.

The workshop was really helpful for me in considering my practice. It was a privilege to listen and talk to people who show compassion, creativity and professionalism in their thinking and practice.There is clearly a need for further discussion, planning, awareness raising and consultation (especially with parents) on the issue of breaking news.

Peter Annear is the Lead Teacher of the Deaf with the Hearing Support Team, Sensory, Physical and Medical Support Service in Somerset.

Teenage angst

At Maria Cameron's workshop participants were asked to explore the social and emotional aspects of being a deaf teenager

The aims of the workshop were to explore teenage issues of deaf identity, positive deaf identity, building self-confidence, dealing with anger and resources available.

The topics discussed make ideal areas for collaborative work between speech and language therapists and Teachers of the Deaf. The best way to carry out some of the work is in groups with both professionals. This enables discussions and collation of a range of view points which all the deaf young people benefit from. However, life is not always ideal and the content can be adapted for working with individuals with either profession. It is important that the deaf teenagers feel comfortable with the adults working with them on these topics as they need to be able to talk about issues that may be very sensitive for them.

Everyone has an image of the 'ideal self' and the 'real self' and the greater the gap, the greater the suffering

The majority of teenagers whether they have a hearing loss or not go through a period of angst about who they are and how they fit into the world and, more particularly, the peer group that surrounds them. For teenagers with a hearing loss there is often an associated gap between their chronological age and their language age which adds to the scenario. Everyone has an image of the 'ideal self' and the 'real self' and the greater the gap, the greater the suffering. In a survey carried out by The Ear Foundation with teenagers many said they sometimes felt deaf and sometimes felt hearing. The gap between how deaf teenagers see themselves, how they would like to be seen and how they really are is often significant. Deaf young people need time and opportunity to discuss their feelings in order to develop a better self-awareness. They need opportunities to meet a wide range of good role models, both adults and peers, especially if they are in an educational setting where they may be the only deaf student. This gives them an outlook on what they can achieve.

Participants at the workshop were encouraged to explore the issues that deaf teenagers need to talk about, such as how being deaf is different from being hearing, what you do if you feel you are not coping and how you are going to cope independently.

We also considered the question: Are deaf teenagers more angry than their hearing peers? The triggers for anger were explored and mapped onto the issues deaf young people have. The outcomes showed why deaf teenagers may be more angry more often than their hearing peers. Deaf young people have many of the same aspirations as their hearing peers – to be cool, to be part of the group, to fade into the background, to be normal and to be sociable. The workshop explored how their deafness and language levels can have a detrimental effect on all these issues.

The workshop then devised a series of sessions that ToDs and speech and language therapists could use to develop a greater understanding in these deaf young people as to what makes them tick. The issues of consequences to actions, responsibility, the 'macho culture', respect, what makes you angry, triggers, how anger works, empathy, inner voices, assertiveness and choices were explored, along with a self-assessment and a plan of how to deal with their feelings.

There are several courses coming up at The Ear Foundation that explore these ideas in more depth. For further information visit the website at www.earfoundation.org.uk/

Maria Cameron is a speech and language therapist and a Teacher of the Deaf at The Ear Foundation.

FM – when and how!

Liz Reed-Beadle, Liz Wood and Richard Vaughan led a workshop introducing practitioners to the rationale for using FM and the basic equipment needed to make the listening conditions easier for a child with a hearing loss

The workshop began by going back to first principles and the need to overcome obstacles to everyday listening. Deaf children find it difficult to listen in class due to background noise, distance and reverberation. Even with the latest audiological technology, these problems cannot be solved by a hearing aid alone. We know that background noise affects the understanding of speech, and we know that the speech signal drops by 6dB with every doubling in distance. We also know there needs to be a good signal-to-noise ratio. For adults to make sense of a speaker in noise they need to have the speaker's voice (signal) 6dB louder than the background noise (noise). This is a signal-to-noise (S/N) ratio of +6dB. However, a child needs +16db S/N ratio and a deaf child needs a +20–30dB S/N ratio. An 'uncontaminated' speech signal is particularly important for young children.

So how does the FM system help? It decreases the distance between speaker and listener delivering the sound direct to the ear. The sound is delivered uncontaminated by noise and reverberation. There are many different types of FM system but each consists of a transmitter which includes a microphone and receiver together with direct audio input (DAI) shoes for the hearing aids. Neck loops are still available for some systems but they are not used routinely in schools.

When to fit an FM system

In the *Quality standards for the use of personal FM systems*, QS1 states that 'every child should be considered as a potential candidate for provision with a personal FM system as part of their amplification package, in line with a written policy on candidacy'. Some services have a policy in place focusing on audiological criteria, but a child may be considered as suitable for other reasons such as asymmetrical hearing loss, additional difficulties or functioning in noise, or the school's acoustic conditions. Flexibility must be allowed for, and a flowchart to help the decision-making process is detailed in the FM QS *Good Practice Guide*.

For children with cochlear implants there are some important general considerations:

- The decision to trial the use of an FM system must be one that has been agreed by all professionals and include the support and agreement by the child/family and local professionals.
- The child should have a stable 'map' and wherever possible be able to report on sound quality.
- Any mapping changes to the child's speech processor need to be made before the FM fitting, by an implant centre audiologist, for example a specific programme may be needed with a correct mixing ratio.
- QS4 recommends that initial fitting and setting up of an FM system must be carried out by an appropriately trained CI professional. In this way everyone can be assured that the FM receiver volume is set optimally.

It is vital for both the fitting of a hearing aid and a cochlear implant with an FM system that correct procedures and policy are followed and that the whole system is evaluated regularly.

Monitoring and checking considerations

The equipment must be kept in good working order to maximise the benefits for users. There should be daily checks of the equipment, both hearing instrument, shoes and components of the FM system. The FM QS *Good Practice Guide* gives suggestions for monitoring and checking FM systems. For example:

- Are the batteries working in the hearing instrument?
- Has the correct shoe been used? Some slide on, some push on, some are fixed to the battery drawer.
- Are there dirty contacts on the hearing instrument – have the cover plates been removed?
- Have the hearing instruments been FM enabled? Some do this automatically when the shoe is attached; others need to be enabled through the programming software at the hospital.
- Is the child wearing the equipment correctly?
- Is the transmitter microphone working?
- Are the transmitter and receiver on the same frequency?
- Is the transmitter microphone muted?

Setting up an FM system with hearing aids is not difficult and most ToDs have been trained in this process. Some systems need verification in a test box as they are said to give the FM advantage automatically. Setting up an FM system with a cochlear implant is a more technical procedure and the child's implant centre should be consulted as often staff there will set up the equipment and provide troubleshooting training. Basic fault-finding requires the process of elimination – be methodical and start with the most likely causes. Finally, know who to call and don't be afraid to ask!

Liz Reed-Beadle is an educational audiologist in Norfolk, Liz Wood is an educational audiologist with the UK FM Working Group and Richard Vaughan is Customer Support Manager at Connevans.

The wheel keeps turning...

With her conference co-ordinator's hat on Ann Underwood surveys past, present and future events

The venue at St Cecilia's School Wandsworth lends itself to having large numbers of workshops and plenty of IT, and the events benefit from good food and helpful staff. It is two years since we were last at the school and tried the experimental video-conferencing event. We had a record number of delegates across three venues, probably prompted by the fact that people didn't have to travel too far. The technology was challenging at times but the event was hailed a success – however, the organisation and 'staff' involved made the venture cost-prohibitive.

Last year in Bristol we returned to the traditional conference with keynote speakers and fewer workshops. The event was quite successful with regard to numbers – and BATOD didn't lose money, even if I lost sleep trying to juggle the late applications and changes of plans. With the possibility of weekend stays in the area some delegates took the opportunity to have a weekend away.

2010 was to be another ground-breaking return to Wandsworth, with a programme planned jointly with speech and language therapists. This time we followed the SENJIT format of a rolling lunchtime which relied on delegates choosing either two or three workshops and therefore opting for a quick cup of soup during a short break and returning for some excellent finger food at the end of workshop two before attending the BATOD AGM or the SLT meeting. Some delegates chose a long lunch break, visiting the exhibition and networking over an excellent buffet lunch; others felt hassled by the two short breaks as they attended the second workshop and then had to spin quickly into the third (compulsory) meetings session.

The planning of this conference was a challenge, with many presenters and a range of topics. However, the real headache came as so many delegates were late applicants and although they had indicated which workshops they were interested in, for some choices there was little take-up. Signing up on the day was interesting and there are management issues around how this happens smoothly that perhaps we need to consider. The presenters prefer to know in advance who will attend!

We always advertise the conference date and topic immediately following the current year's event. Application forms are available in the website folder from September and we hope that everyone has time to plan their performance management targets, funding and their personal diaries.

We will be sharing the outcomes from the evaluation sheets with members who log onto the BATOD website in the Conference 2010 folder – and there is a link to the photo gallery from the day at www.picasaweb.google.com/BATODpublications/ Some of the presentations may be available but as always this Magazine carries several articles written by the presenters at the Conference.

Next year the conference date is **19 March 2011 and it will be in Newcastle.** The title is Gary Anderson's strapline for his two years in office as President 'Stronger together'. We hope to offer some workshops covering effective support for our deaf young people, especially in the secondary phase of their education. We will be looking at how we work with fellow professionals – educational audiologists, social workers, other ToDs, CI teams, transition teams, suppliers and manufacturers. If you think that you have something to share with colleagues or can suggest workshops that might be included please let me know as soon as possible this term – cpd@BATOD.org.uk.

Ann Underwood is the BATOD manager for publications and the website and was President of BATOD 2008–10.

Flying high once again

Readers will be interested to know that despite a hectic two years as President, conference organiser, website manager, publications manager and advertising manager, Ann Underwood has been very busy in another area of life and has been recognised for it. She has been presented with the Silver Acorn, which is awarded to services in Scouting. This is for her work with the parascending teams across the UK and with the national governing body, the British Hang Gliding and Paragliding Association. Apart from being the Chief Flying Instructor and running Sky Lincs Scout Parascending team, providing courses for Scouts annually, she also organises a camp based around parascending (and other air-related activities http://picasaweb.google.co.uk/SkyLincs/SkyHigh2009#) while also acting as a national technical adviser. She is also the Air Adviser for Humberside. Congratulations to Ann on receiving this prestigious award.

Wicked programmes!

A new TV series in BSL featuring drama, animation, factual items and signed song is now available online, as Catherine Drew reveals

The British Sign Language Broadcasting Trust (BSLBT) was established in 2008 to increase the amount of sign-presented programming on television. To date BSLBT has commissioned 50 half-hour programmes, with diverse themes ranging from the Deaflympics to drama, with deaf role models in the community and, most importantly, producing deaf children's programmes all in British Sign Language (BSL).

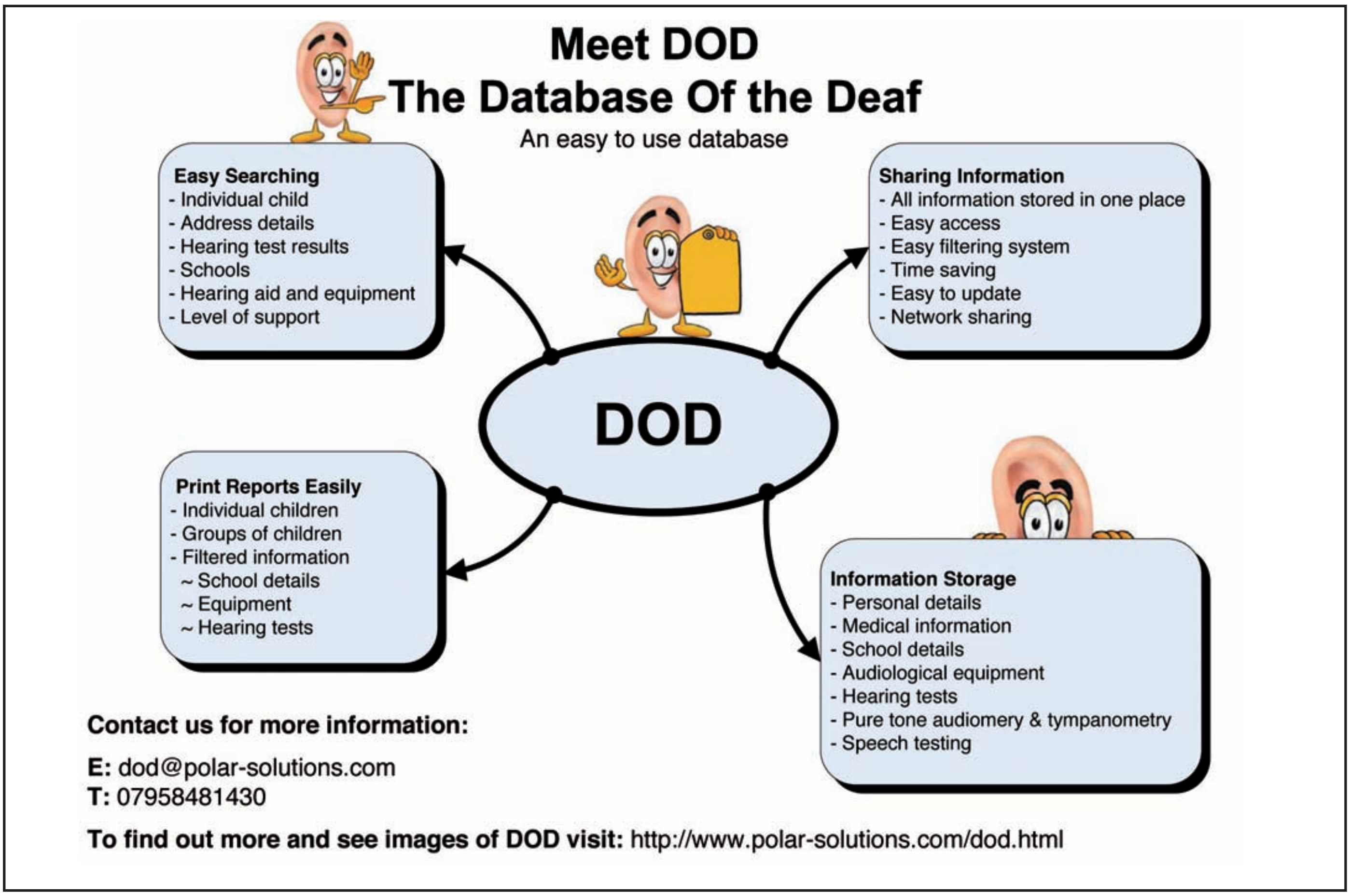
In October 2009, BSLBT launched a brand new series of children's programmes: *Little Wicked* and *Wicked Kids*. The programmes are the first of their kind as they are presented in BSL making them accessible for deaf children using BSL as their first language.

Gamelab, an interactive design and gaming for education company, commissioned for this project, visited Frank Barnes School for Deaf Children and filmed the Year 1, 2 and 3 pupils in a series of workshops as part of the series of *Little Wicked*. Activities such as face painting, cake decorating, mask making and hand painting were filmed.

The *Little Wicked* programmes are aimed at the 3–7 age range and feature a series of colourful Little Wicked Monsters (shown above). These four programmes have been broadcast on the BSL Zone on the Community Channel and are now on the BSLBT's Little Wicked website and available to view online. You can download goodie bags which have various activities such as colouring Little Wicked Monsters and making your own shadow characters to work with either in class or at home.

For more information visit www.bslbt.co.uk/kids www.fbarnes.camden.sch.uk or contact Catherine Drew at deafstudies@fbarnes.camden.sch.uk.

Catherine Drew is a Deaf Instructor at Frank Barnes School.



People and communication matter

Ann Underwood reports on a fascinating conference looking at how much things have moved on in the communication world with the rapid development of technologies

The UK Council on Deafness (UKCoD) and The Ear Foundation presented a well-attended joint conference in early March entitled 'Advancing technologies: opening new communication opportunities'.

Adrian Davies opened the conference from an NHS aspect, acknowledging that we have some wonderful equipment but we need to mastermind the implementation of workforce change to ensure that more people benefit. This will need extremely good management systems. Although waiting times are much improved this is not universal across the UK and patients are not at the forefront. We need to think strategically but the stigma of hearing loss and wearing hearing aids presents huge functional implications – possibly online rehab could be the way forward. Adrian presented some statistical analysis which can be viewed on the UKCoD website.

Seven-year-old Callum is a bilateral CI user originally identified at neonatal screening. By the time he was two he had had his first cochlear implant – which he didn't like because of the buzzing and loudness of sounds! This obviously settled down with tuning but early mornings remain times when he likes to be 'quiet' and is less keen to switch on. This proud young man took centre stage with his dad in explaining about using two implants. Callum's communication in the early years was with sign language but after his first implant the focus was on an aural/oral approach, although when he is not wearing his implants (swimming, bathtime and bedtime) the family continues to use sign – and Callum communicates with some of his peers that way too. His father Graham reminded those present that it is important not to forget that Callum remains a profoundly deaf young man even if his speech is clear and his hearing good enough to use a telephone on speaker mode.

Yvonne James from Advanced Bionics explained that the criteria for acceptance for cochlear implantation have changed as things have progressed. Profound deafness (90dBHL) or a ski-slope loss are taken alongside speech perception tests for adults and consideration of age-appropriate and developmental levels of speech, listening and language skills for children. Yvonne pointed out that hearing aids amplify sound whereas CIs translate speech information into electrical signals which bypass the sensory cells passing directly to the auditory nerve.

Paula Greenham, a scientist doing clinical research for Advanced Bionics, looked into her crystal ball to consider future CI technology. Already with the advent of the thinnest and slimmest and most reliable implants, the Tiki – a totally implantable CI – is being trialled. It is sited completely under the skin, in the mastoid bone, and has a rechargeable battery. The three pilot implantations so far have shown that there needs to be development of the processor which is not as efficient as a behind-the-ear model as it picks up body noise via the internally implanted microphone. There are benefits though: 24-hour wearing, invisible and waterproof – something at the top of many aid wearers wish lists for bathtime and swimming.

While considering processing and programming Paula talked about differing approaches to mapping – totally automatic, a mixture of clinician, patient and computer and then the clinician making all the decisions. The future could see the process being completed online using the home laptop, thus reducing time taken on hospital visits.

Design of the system for delivering the signal to the nerves and neurons is moving towards high density arrays significantly increasing the electrode number from 22 to possibly as many as 150. This would enable high quality listening for music lovers. Advanced Bionics is working with the University of Michigan on this thin-film technology. Nanotechnology science is developing a very small electrode which can grow towards tissue or visa versa – the tissue grows around the electrode. The electrode would self-assemble/build itself in situ!

Other advances include electrodes being used to deliver drugs which encourage auditory nerve regrowth – neurotrophins stimulate all regeneration – which could help with the regrowth of hair cells. Implants could also be used to preserve residual hearing and also assist both with asymmetrical loss and tinnitus. Non-cochlear stimulator implants in both auditory brainstem and midbrain as well as vestibular implants are in their early infancy. The research and development arms of the various companies have a global network to develop these products.

Bencie Woll described fascinating research into language and the brain (see also page 4 of this Magazine). Most language is processed on the left side of the brain – whether sign or spoken language. Silent speech is processed (speechreading) in significantly similar areas of the left side of the brain. There is slightly less correlation for text and pictures – as there is not a changing dynamic image involved. Very similar areas of the brain are used when making phonological judgements in English and BSL. Speech gets to the parts whether you have sound nor not!

In all situations the noise floor – background noise, reverberation, echoes and distance – affects the ability to hear. A good signal-to-noise ratio is needed for a person to follow speech – in fact +18dB signal-to-noise ratio. A hearing aid alone cannot do this and so there is a range of assistive listening devices which Graham Hilton from Phonak described. These included loops, TV, radio, phones, text phones, video conferencing and neck loops. The FM systems developed in the 1960s have progressed to miniaturisation and use of digital technology. The microphones not only pick up sound at source but they are also able to be adaptive with omni-direction, zoom and superzoom ability. Now dynamic FM rules out the noise floor and reduces background noise to insignificance. Every user has indicated a preference for this dynamic FM!

The progression of bluetooth technology has enabled digital wireless technology to move forward as it doesn't require proactive management. By attaching a bluetooth 'dongle' to a device the message can be conveyed to the hearing aid. This has led to the concept of the BAN (Body Area Network) which is analogous to a LAN (Local Area Network). Phonak offers the iCoM, a loop which receives digitally encrypted information from TV, computers, Sat Nav and other equipment via bluetooth to both hearing aids – effectively offering stereo reception via a single connection. There is also the Click and Talk which at present is compatible with Sony Ericsson phones and which switches the phone loop automatically. The suggestion is clearly that the old infrared is being replaced by bluetooth technology in a wide range of situations.

In closing Dr Lorraine Gailey 'squared the circle' or joined it up, asking if advances always result in better hearing and if better hearing always results in better communication. It is essential to ensure that we show people how to use the technology to its best advantage. No hearing aid can enhance the quality of life if it is in the drawer. If we forget to focus on the person (rather than on their ears) we will fail to derive the maximum benefit from the technology.

Ann Underwood is the BATOD manager for publications and the website and was President of BATOD 2008–10.

Access to maths

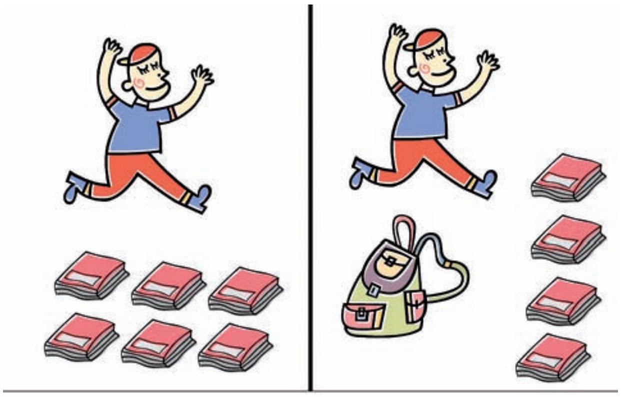
Terezinha Nunes and her team at Oxford University continue their research into suitable interventions for improving the mathematics skills of young deaf learners

The family-school partnership to promote deaf children's education is a project supported by the NDCS in co-operation with the University of Oxford. During this school year, we have been testing the effectiveness of a programme to promote young deaf children's understanding of some mathematical ideas that are necessary for accessing the mathematics that they are taught in school. These mathematical ideas are learnt by most (but not all) hearing children informally, before they start school. Children who start school without much insight into these concepts tend to have great difficulty in learning mathematics.

Our previous research has shown that children who have not developed these informal ideas may have mathematics difficulties. The percentage of deaf children who start school without the informal mathematical knowledge that they need in order to access the curriculum is higher than the percentage of hearing children in the same situation. Whereas about one-third of the hearing children need help to develop this informal knowledge, most deaf children need help. With the support of RNID, we developed a teaching programme to promote these informal concepts and tested its effectiveness with deaf children. Our research showed that this programme was quite effective: the majority of the participants learnt more about the concepts than the children in a comparison group and also performed better in a mathematics test at the end of the year. The mathematics test used in this comparison was the PIPS (Performance Indicators in Primary School), which is a good predictor of children's performance in Key Stage assessments.

> **The programme includes four aspects of children's informal mathematics knowledge that are crucial for accessing the curriculum**

With the support of the NDCS, we are currently evaluating the effectiveness of an enhanced programme, which contains activities for the classroom as well as board and computer games that the children can play at home or at school to increase the amount of practice that they have in using the concepts. The programme includes four aspects of children's informal mathematics knowledge that are crucial for accessing the curriculum; previous research showed that deaf children need support in all of these.



How many books did the boy put in his bag?

Reasoning about part-whole relations

When children start school, they already understand that they can solve addition story problems by representing the objects in the story with fingers or cubes, then counting them all together. They also understand that they can do the same with subtraction: represent the objects in the story, separate them, and count what is left. For example, if the story problem is: 'A boy had four biscuits; he ate one at lunchtime; how many does he have now?', most five year olds can represent the four biscuits with four cubes, remove one cube, count the remaining three, and give the right answer. Deaf children show a delay in this understanding at school entry when compared with hearing children. However, if the story is presented to them using pictures, like in a cartoon, where all the parts of the story can be seen simultaneously, the difference between deaf and hearing children disappears. Thus there is a difference in deaf children's performance but perhaps not in their competence: if the story is presented with the appropriate visual support and the deaf children are encouraged to use cubes to represent the objects, they do as well as hearing children in these addition and subtraction problems. They do need practice to think about different types of situation and make further progress in problem solving. This is one of the elements in the programme – the children are involved in solving lots of problems from the start.

The inverse relation between addition and subtraction

At school entry, most hearing children understand that, for example, if they have seven marbles, add five to these and take away five, they end up with seven marbles. They know that they do not need to count the marbles or carry out any computations to find the answer to this problem. They are confident in using reasoning to solve this sort of problem. Children are not taught about this inverse relation between addition and subtraction in school – this is part of the informal knowledge of number that they develop before school. However, they need to understand this inverse relation in order to understand other things that they are taught. For example, they are taught that if they want to solve a subtraction problem, sometimes it is easier to find the result by addition: to solve the question 42 – 39, instead of counting back 39 numbers from 42, they can count up from 39 to 42 to find the answer. Children do not realise why this works if they do not understand the inverse relation between addition and subtraction. Our previous research showed that deaf children are delayed in understanding that addition and subtraction are the inverse of each other, but it also showed that they can quickly learn about this inverse relation if they are taught explicitly and with the support of visual materials.

Deaf children are delayed in understanding that addition and subtraction are the inverse of each other

Additive composition of number

In order to learn to read and write numbers, children must understand that any number can be seen as the sum of other numbers; for example, 13 is the same as 10 plus 3. Most hearing children understand this by the age of six, although they are not taught this concept; they learn it informally. Our study showed that deaf children are significantly behind hearing children in this insight. However, they can learn this idea if they are taught with the help of visual stimuli, and even a brief teaching programme has lasting results.

Multiplicative reasoning

Children need to learn to think about multipart units to understand our number system. For example, in the number 52, they need to understand that the digit 5 indicates 5 x 10 – that is, it is a multipart unit because each unit contains 10 single units. We use two types of activities to help children understand this concept. In one type of activity, they set objects in one-to-many correspondence with others in order to solve problems: for example, if they know that there are four rabbits inside each house, they need to set four carrots in correspondence with each house so that each rabbit can have one carrot. In another set of activities, they exchange one coin of a larger value for the right number of 1p coins. Our previous research showed that teaching can significantly improve the performance of deaf children, but that this teaching should not be too brief in order for the gains that the children make during the programme to be maintained in the long term.

In short, deaf children start school at risk for difficulties in learning mathematics because they have not developed informally some concepts that are not taught in school, but are required for understanding what is taught. The deaf children in our research did not seem to have serious difficulties with these concepts, once they received appropriate teaching that made good use of visual support and offered lots of opportunities for practice.

The involvement of the family, when possible, makes a great contribution to the children's learning

Our current project integrates the teaching of these concepts into a programme that can be run over two or three school terms, using about four slots of half an hour each week. It is an enrichment programme, with the aim not to replace the curriculum but to support children's understanding of the materials in the curriculum. Our previous research showed that when teachers implemented this enrichment programme in the classroom, as part of the children's regular mathematics lessons, the deaf children showed significant gains in their mathematics learning, assessed by traditional tests. In order to make these gains more stable over time, the current project has increased the number of activities and included games that the children can play with their families at home. The involvement of the family, when possible, makes a great contribution to the children's learning. So far, teachers are very positive about the results of the programme but the final assessment will only be concluded in the summer. Once the programme has been evaluated, it will be freely available for downloading from our website: www.education.ox.ac.uk/research/resgroup/cl/

You can find more information about part one of the programme in the January 2007 issue of the BATOD Magazine (pages 3–4).

Terezinha Nunes is the Chair of Educational Studies at the Department of Educational Studies, University of Oxford.

Charity research

From funding research into gene mutations to touring the country with a bionic ear – Vivienne Michael highlights the work of Deafness Research UK

Deafness Research UK is the country's only national charity dedicated to helping deaf and hard of hearing people through medical research and education. The charity was founded in 1985 by Jack (now Lord) Ashley, who is profoundly deaf, and his late wife, Pauline, because they believed that no one should have to live with unwanted hearing impairment.

To date the charity has awarded more than £10 million in grants for research in UK universities and hospitals. It has been responsible for a number of significant advances, including:

- Development of the Otoacoustic Emissions (OAE) test that enables deaf babies to be identified at birth.
- Improving the effectiveness of cochlear implants through research into assessment, fitting and rehabilitation procedures for children.
- Developments in signal processing for digital hearing aids in order to improve speech discrimination and understanding, particularly in noisy environments.
- Isolating genes responsible for many forms of inherited deafness, including the most important breakthrough – that mutations in the Connexin-26 gene cause a significant proportion of congenital and childhood deafness.
- Research into preventing or repairing inner ear damage, including funding researchers who were the first to report that hair cells in the mammalian balance system can regenerate.

Deafness Research UK has funded many projects to study the effects of hearing disorders on children. Recent studies include the following:

Positive support in the lives of deaf children and their families – this four-year, £500,000 project, led by research teams at the University of Manchester and University College, London (UCL) and supported by the National Lottery, has just been completed. It explored how the role of the family, education and health services and different interventions, such as provision of hearing aids, can affect the development of individual children and help them reach their full potential in life.

Bilateral versus unilateral cochlear implantation in profoundly deaf children – a two-year study by Margaret Tait of The Ear Foundation used video analysis to compare the communication skills of very young profoundly deaf children who have two cochlear implants with those of children with one implant. The study has shown that it is possible to assess the early communication skills of these children and to evaluate the impact of bilateral compared with unilateral implantation on the development of these skills. The results of the study support the provision of bilateral implantation.

The nature of central auditory processing disorder in children – a three-year studentship supervised by Professor Dorothy Bishop at the University of Oxford aimed to shed light on a controversial disorder that affects up to 10% of children in the UK. Auditory processing disorder (APD) is a diagnosis sometimes given to children who seem to have trouble with listening, especially in noisy situations, despite having normal hearing when tested by an audiologist. Typically, children diagnosed with APD will have difficulty with tasks such as identifying or discriminating between different sounds. The study found that the heterogeneous nature of this disorder makes diagnosis difficult and recommends the use of a battery of tests, including lingual and non-lingual assessments and more objective electrophysiological tests.

Processing visual prosody of speech and sign – Professor Bencie Woll at London's Deafness Cognition and Language Research Centre (DCAL) supervised a three-year studentship which aimed to examine the type of visual cues present at the boundaries in British Sign Language (BSL) and in visually perceived spoken language – for example, between sentences – and assess whether these boundaries can be seen by different groups and used for sentence segmentation. The results showed that visual cues alone are an important aid to understanding face-to-face communication and the next steps will be to investigate how visual prosodic cues are used to improve comprehension in speechreading and in understanding sign language.

All the charity's research undergoes rigorous peer review to ensure that it is not only of the highest quality but is relevant and stands a good chance of benefiting hearing-impaired people.

Supporting auditory centres of excellence

After a successful appeal which raised over £1 million to provide studentships and fellowships at the UCL Ear Institute, the charity is now launching a programme to support centres of excellence across the UK where there is an exceptional opportunity for furthering the cause of deafness research.

The charity is also committed to contributing to the sustainability of deafness research in the UK and, by developing the research of talented young investigators, aims to build the capacity of UK hearing research and ensure that high quality research will continue to be undertaken here in the future.

Communicating research findings

Given its unique position linking those affected by hearing problems, scientists and clinicians, the charity also has a particular interest in the dissemination of research results to the wider community and runs regular meetings and forums such as the Recent Advances in Paediatric Audiology (RAPA) meeting. The second RAPA symposium took place in March during National Knowledge Week for Hearing and was chaired by Professor David Moore, Director of the MRC's Institute of Hearing Research. The meeting focused on follow-up after early detection of deafness, the critical period for cochlear implantation and advances in brainstem physiology. The aim was to increase interaction and knowledge sharing between the clinic and the laboratory and contribute to a culture change in auditory science. It was attended by both clinicians and hearing researchers.

Community and outreach projects

Deafness Research UK has been widely acknowledged for the creative and innovative nature of its community and outreach projects, some of which are summarised below.

It's My Future

Organised in association with the DCAL, the It's My Future competition encourages young deaf people to contribute their ideas about what they would like research to achieve over the next 20 years. In 2009, young people were asked for their opinions on topics such as whether doctors in 2019 will be able to grow replacement parts for ears, whether there will be new or different ways to communicate in BSL, and the future of cochlear implants.

The competition was judged by a panel of deaf and hearing experts in deafness and hearing research chaired by Malcolm Bruce MP, Chairman of the All Party Parliamentary Group on Deafness. Winners attended a prize-giving ceremony at the House of Commons. It's My Future 2010/11 is to be launched in the autumn, with a prize-giving early in 2011. The dates for this event will be confirmed soon on the Deafness Research UK website.

Bionic Ear Show

2010 also sees the relaunch of Deafness Research UK's innovative educational roadshow, the Bionic Ear Show, which first toured UK schools and science festivals in 2008. More recently, the show was developed for the international integrated energy and refining giant, ConocoPhillips, visiting the company's onshore and offshore sites as part of its *Year of the Ear* programme to promote awareness of the dangers of noise-induced hearing loss and ways of maintaining good hearing.

The show, which features 'the world's largest ear', has a serious message about risks to hearing and the impact of hearing impairment, but it is also designed to be fun and interactive. During the performance, the presenter builds a 22ft model of the ear – 116 times the size of a normal ear – to demonstrate how the ear works, what can go wrong and what can be done to fix it. The show is easy to understand, even with no science knowledge. There are demonstrations, including what it sounds like to have high frequency hearing loss and 'Guess that tune!' – how easy or difficult is it for people with cochlear implants to recognise music?

With the support of health insurance company BUPA, the 2010 Bionic Ear Show will be coming to a town or city near you specifically targeting the socially excluded, ethnic minorities, older people, younger people and rural communities. For more information visit www.bionicearshow.org/

Providing an Information Service to all

The Deafness Research UK Information Service provides free information and advice based on the latest scientific evidence and informed by leading experts. Recent publications launched by the service include a leaflet on managing tinnitus. It also produces information on a range of hearing conditions affecting children and can refer complex enquiries to advisers who are audiologists and ENT consultants, as well as experts in areas where it can be difficult to find information, such as APD and hyperacusis.

Materials are also available on the subject of glue ear which, although a temporary experience for most, can impact on learning if not dealt with appropriately. There is information to help people communicate better with children with glue ear and there is also specific guidance for teachers.

Other topics covered are cochlear implants, middle ear infections, meningitis and hearing loss and hearing tests for babies and children.

For more information contact Deafness Research UK on Freephone 0808 808 2222, email contact@deafnessresearch.org.uk or visit the website at www.deafnessresearch.org.uk/

Vivienne Michael is the Chief Executive Officer of Deafness Research UK.

Chatty Monkeys

With their workshops and programme of fun activities, two pre-school groups in Berkshire provide a haven of support for families of deaf children, according to Jane Peters

The Sensory Consortium Service (SCS) in Berkshire runs two pre-school groups called Chatty Monkeys for families of children with a diagnosed hearing loss.

The groups meet every fortnight – one in the east of the county in Slough and one in the west near Reading – as part of the Sensory Consortium Service (SCS) Pre-school Programme visits allocated to the children on the caseload. By allocating visits in this way we are able to staff the groups and provide more effective support for our families and young people alongside our home teaching programme.

The groups aim to:
- give families an opportunity to get together in a supportive environment where they have access to specialist teachers of the hearing-impaired and our educational support assistants
- provide planned activities linked to the Every Child Matters (ECM) outcomes and Early Years Foundation Stage to help families with ideas on how to promote good communication skills through play
- create opportunities for families to meet other families and share their experiences, providing support for each other
- model activities on a one-to-one basis and in the whole group session
- create opportunities for children to meet other children who wear hearing aids or have a cochlear implant
- provide family-friendly audiological support.

As part of the fortnightly programme we also have a number of morning workshops throughout the year which last about three-quarters of an hour. Sometimes we invite guest speakers or facilitate joint training sessions with other professionals on topics such as managing behaviour, getting the most out of the Monitoring Protocol, promoting literacy or numeracy skills or developing language through play. Parents have the option to join in or stay in the main group. At these sessions we can provide a crèche so that families have the opportunity to enjoy a cup of coffee while sharing their ideas and experiences and discussing topics relating to hearing impairment.

Planning both termly and for each session is an important part of running the groups. We get together to identify a theme for the term – routines, nursery rhymes, parts of the body, traditional stories are a few examples – and then one of the teachers is responsible for the more detailed planning for the session, selecting the toys and activities necessary for that day, choosing particular songs or books and delivering the focus activity. All the planning is recorded against ECM outcomes.

Routine is a key element of the sessions both in terms of how the morning is run and also the songs we sing. We feel that it is important to have lots of opportunities for repetition of language – we have a core bank of songs which we try to use every week, including a hello and goodbye song. Snack time, when we all sit down together, sing our hello song and share fruit and a drink, provides rich opportunities for developing social skills as well as vocabulary and listening. Our focus is all about developing communication and listening skills whether it is through the art activity, dressing up, doing a jigsaw or making pancakes!

After each session we spend some time as a team evaluating what went well and what we would do differently. We also record any particular areas where we want to feed back on individual children to the Teacher of the Deaf who visits them at home so these can be followed up, observations celebrated and concerns raised.

The west group – the one with which I am directly involved – is the larger of the two groups with between 15–20 families attending on a regular basis, sometimes including 20 children. Although mainly mums attend we do have a regular number of dads and sometimes grandparents. Everyone who supports the child is welcome, as are siblings. The children range from a couple of weeks old to about three-and-a-half years, with mild to profound hearing losses. A number may also have additional learning needs or a visual impairment and some use a signing communication mode.

In order to provide effectively for this number of families our team consists of:
- three Teachers of the Deaf – Pam, Celia and myself. Pam is also our MSI teacher
- two SCS teaching assistants – Lynn and Nin
- Vicky, who is profoundly deaf and previously came along as a parent with her son. She is often involved in the art and craft with the children
- Deborah, who has a profoundly deaf nephew on our caseload and who makes coffee and gets to know the new families
- one of the audiologists from the Royal Berkshire Hospital who attends every session to answer questions and take ear mould impressions
- Katie, our local Family Officer from the National Deaf Children's Society, who attends a couple of times a term to provide advice to parents and often helps with the Disability Living Allowance forms
- and, of course, Charlie our Monkey, who is an excellent hearing aid wearer!

Other colleagues from the Speech and Language Therapy Service, educational psychologists, Deaf Social Care Team and the early years teachers can also arrange to join us to meet families and to see the children in a different context which is really helpful for families and can provide useful information. 'Does he always talk this much? He never says anything in my sessions.' (speech therapist)

So what do we do at a typical session?
- 9.30am onwards – coffee, chat and play, plus ear moulds
- 10.30am – healthy snack time for the children, and any notices are given at this point
- 10.45am – whole group focus activity
- 11.10am – singing
- 11.30am – time to go home.

'The Hearing-Impaired Pre-School Group is a friendly group where parents and children can meet. The children have lots of fun with stories, games, songs and crafts and while they're having fun they're learning to listen. It's the only time in my week when I can finish a cup of coffee!' (a pre-school group mum)

In the east group there is a higher number of families where English is the second language. Nin, our specialist support teaching assistant, is able to get to know these families and support them more effectively. Although numbers are smaller the group provides another valuable way to complement the home teaching programme.

As a service we continually face a number of challenges:
- How to get parents to access the groups when they may have transport difficulties and come from a wide geographical area.
- How to meet the needs of such a diverse group of families and children with different hearing losses and perhaps additional learning needs.
- Finding suitable venues which are easily accessible for families, provide enough space and flexible accommodation to suit our needs and have good acoustics.

The groups are funded by the SCS with additional support from our local deaf children's societies and local fundraising to help with special events such as the Christmas party and summer picnic.

Running pre-school groups is hard work but it is also fun and an invaluable way of supporting families. It is exciting to get to know parents and see them grow in confidence and resilience in supporting their hearing-impaired children and to celebrate the children's achievements together. Parents are eager to share how their child is now wearing their aids every day or tell us about their first words! Sometimes there are tears – tears of frustration, disappointment or when an additional diagnosis of another learning need has been identified. It is moving to see how often it is another parent who is the first to offer comfort and advice and how the families support each other away from the group. From small beginnings the groups have grown into something quite special.

Jane Peters is the Service Development Co-ordinator with the Sensory Consortium Service in Berkshire.

Teaching deaf children and young people in Sierra Leone

From first-hand accounts and school visits, Patricia Gbetuwa, Siddie Kanu, Mustapha Kargbo and Romaine Ketekou have pieced together a history of deaf education in Sierra Leone

A British woman, Ruth Luke, was Headmistress of Buxton Girls' School, Freetown, in the 1960s. Teachers gave her weekly reports of each pupil's development. Ruth noticed that a few children were always bottom of the class. She took a special interest in these pupils and tried to find out why they were not making progress. She discovered that they were deaf and she immediately wanted to help them.

Ruth discussed the problem with the late Lati Hyde-Forster, Principal of the Annie Walsh Memorial School, and both women were anxious to find ways to support these children. They decided to send out a questionnaire to find out how many deaf pupils were in other schools. Through the replies they located at least 60 children who were deaf.

Ruth took the findings to the Chief Education Officer, William Conton. The decision was made to invite interested people to meet at Cathedral House and this became the venue for all subsequent meetings. Those present included Dr Bai Johnson, Chief Medical Officer, Reverend Dr Shudike, Chief Social Welfare Officer and Emmi Pratt, a teacher at the Methodist Girls' High School. It was decided to form the Sierra Leone Society for the Deaf, with its main aim to provide specialised education for deaf pupils. Justice Forster was elected president and Ruth Luke secretary. Ruth wrote to Lady Templar, President of the Royal Commonwealth Society for the Deaf, to inform her of the inauguration of the Society for the Deaf. A request was made for funds to train a teacher who would start the first school for deaf pupils in Sierra Leone. Lady Templar's reply was favourable; the Commonwealth Society would sponsor a teacher to go to England for training. At the next meeting members were asked to find a suitable candidate and Eleanor Renner Lisk, a teacher at Buxton Primary School, was awarded the Commonwealth Society Scholarship.

After successfully completing her studies, Eleanor opened the first school for deaf children with six pupils. Classes were held in the basement of Regent Road Baptist School, after the normal school closed, from 2.30pm to 5.30pm on weekdays. Gradually numbers increased and the Ministry of Lands and Survey donated land on Wilkinson Road where the present school now stands. The Society for the Deaf organised a fundraising event to raise money to build the school. The women's Coroma Society, whose members included wives of senior civil servants as well as the President's wife, was especially active in fundraising.

The current status of Freetown School for the Deaf

The present roll of the Sierra Leone Society School for the Deaf is 130 pupils and 12 teachers. Some have teachers' certificates, others have received technical training, but there are no trained Teachers of the Deaf. The school follows the Ministry of Education's National Curriculum, delivered through sign language and finger spelling. No pupils have hearing aids. Pupils enter the school without hearing assessment and no audiograms are available.

Some pupils continue to mainstream secondary education after completing the National Primary School Examination but many tend to drop out because class sizes are large, and over-stretched secondary teachers have no time to help pupils with special needs.

The future of the Freetown School

The school hopes that the Government will allow it to develop its own secondary department and will support the training of teachers in special education. Funds are also needed for the daily running of the school and to pay teachers' salaries as the main sponsor, the Christian Children's Fund, has folded.

The founding of St Joseph's School for the Deaf, Makeni

The Freetown School had no boarding facilities and parents outside the city were unable to gain access to specialised education for their deaf children. In 1977, Terre des Hommes, a Dutch non-governmental organisation, identified 400 children with disabilities, including eight children who were deaf, in the Makeni area. Sister Mary Sweeney, principal of a Catholic

primary school, contacted Mother Mary Nicholas in Cabra, Ireland, to seek advice about how to support these deaf children. Mother Mary arranged for an Irish organisation, Friends of the Deaf, to give a scholarship to train a Teacher of the Deaf, preferably a Sister. The Sisters of St Joseph of Cluny felt that this was a call from God to serve the most needy, and Sister Mary Sweeney, already experienced in working with disabled children, was chosen. During her training Tom Bristow, a Peace Corps volunteer, assisted by George Nii Quartey from Ghana, began working with the eight deaf children. The Cluny Sisters decided to convert the boarding quarters of St Joseph's Convent into a school for the deaf. In 1982 the school was approved by the Ministry of Education and now accommodates 215 pupils from all parts of Sierra Leone. Over the years teachers have trained in Dublin, Sint Michielsgestel in the Netherlands, and at Birmingham University. Recently, special education courses that focus on deafness, at certificate, diploma and degree levels have been validated by the Fatima Institute which is now incorporated into the University of Makeni.

The war years: based on an interview with Andrew Dumbuya, Deputy Headteacher

Andrew arrived as a teacher at St Joseph's School for the Deaf in 1986. He expected to be appointed to a local primary school and was taken aback when he was sent to a school for deaf children. He knew nothing about deafness and how to teach and handle his pupils was a big challenge. Now, 24 years later, as one of the first teachers at St Joseph's to achieve a BEd degree in special education, hearing impairment, through the University of Makeni, Andrew says that he is still learning.

The Sierra Leone war began in 1991 and Makeni was attacked in December 1998. During that period the main concern was where to take the deaf pupils, as many parents showed no concern for their own children and often rejected them. Some parents had fled for their lives and could not come for their children. Everyone was hoping that the war would end soon. Since May 1998 the school dormitories had given refuge to mutilated amputees, and staff and pupils helped to care for them. When Makeni Town was attacked most people ran away and some teachers took the children into their care as part of their families. Some pupils who stayed were forced to join the rebels as boy soldiers.

Some went to Freetown and met representatives of the deaf associations there. They became child labourers. Sadly, some girls became prostitutes and some were trafficked. Teachers who moved from Makeni to Freetown gathered some of the displaced pupils together. Sister Mary Sweeney asked for some classrooms and Sister Clare Stanley offered two small store rooms in the Charlotte Street Convent. In total, 89 children came to the school but the class area was too small to accommodate them all and so the courtyard was used as a teaching area. It was a difficult time for teachers and pupils alike as they had to walk long distances to attend school each morning. This displaced school lasted for about one year. Regrettably, members of the adult deaf community in Freetown put pressure on our older pupils not to attend or else tried to use them, because they were educated, as a front when applying for project funding.

During the war the Makeni School compound was occupied by rebel troops. All the buildings were vandalised and everything that could be moved was looted. All that was left intact were walls and some steel windows. With the combined help of generous donors, Cordaid, Irish Aid and Trocaire, rebuilding started, furniture was replaced and equipment began to arrive. Teacher training, delivered mainly by visiting tutors, began with workshops and in-service training.

Now St Joseph's School is full of hope and expectancy. Teachers and pupils benefit from a curriculum based on the maternal reflective approach, all pupils have hearing aids and the audiology department has two trained technicians. Our Headteacher, Umu Turay, has just returned from UK with a Master's degree in special education from Birmingham University. We are moving ahead with confidence.

There are many gaps in this brief account. Readers' personal experiences of working in schools for the deaf in Sierra Leone would be welcomed. Please contact Ruth McAree through the Editor of this Magazine.

This article was written, with the support of Ruth McAree, by Patricia Gbetuwa, Siddie Kanu, Mustapha Kargbo and Romaine Ketekou, four students of the University of Makeni, as part of the Diploma in Special Education (Hearing Impairment).

PC Werth
Advanced Sound Technologies
www.pcwerth.co.uk

THE COMPLETE RANGE OF SOLUTIONS FOR TEACHERS OF THE DEAF & EDUCATIONAL AUDIOLOGISTS

PC Werth SOUNDFIELD systems

PC Werth AUDIOLOGY equipment

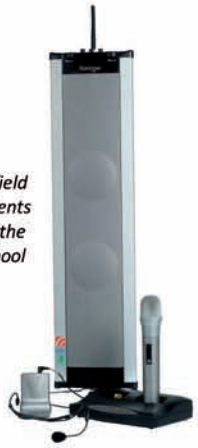
PC Werth ACCESSORIES for audiology

The leading systems on the market – frontrow for active learning by Phonic Ear have more experience than anyone designing and manufacturing systems for teachers, kids and classes:

- High performance, ergonomic microphone solutions
- Easy to use base stations with the minimum of buttons
- Minimum installation complexity
- Child-friendly pass-around microphones
- Advanced digital feedback management

Our "Smiley mic" is loved by teachers for its performance and comfort

The easy to use FrontRow Pro is the only Soundfield system with anti-feedback & energy-star technology



Portable Soundfield supports HI students perfectly and is the ideal mobile school PA system!

Perfect intelligibility and full coverage, no matter where you are or where you are facing

- **Free trials**
- **Personal on site assessments and support**
- **Back up for-life from PC Werth**
- **Complete end-to-end support for HI children, class refurb or new build projects**
- **Full training and in-class product support**
- **Experts in working with BSF projects, architects and Local Authorities**
- **Integration advice and support with all multimedia and HI equipment**
- **Personal and friendly service!**

PC Werth is expert in Soundfield integration, including provision for HI students, such as with the cost-effective PhonicEar Solaris Flex system

New Range!
Ask about our
Portable Wireless PA Systems

SOUNDFIELD PC Werth
www.soundfield.info

Trusted Through Experience

REGISTER FOR NEWS, UPDATES AND INFORMATION TODAY AT WWW.PCWERTH.CO.UK OR CALL 020 8772 2700

BATOD North

Audiological competencies: making a difference

Wednesday 13 October 2010
Woodlands Conference Centre
Southport Road Chorley PR7 1QR
Conf fee £60.00 BATOD members £ 40.00

Topics include:

- Setting up and evaluating FM systems with hearing aids and cochlear implants;
- speech audiometry;
- classroom acoustics and soundfield systems;
- pupil understanding and management of their own hearing loss and personal equipment; aetiology and its implications for the use of residual hearing

Further details
Trish Cope, BATOD North Secretary
23 North Drive, High Legh, Knutsford, Cheshire
WA16 6WX
batodnorth@BATOD.org.uk

www.batodfoundation.org.uk

The BATOD Foundation is a research, training and information based charity dedicated to improving the life chances of deaf children and young people by disseminating the outcomes of research projects supported by the Foundation - to raise awareness and competence.

Visit our developing website and find out how you can help us to raise funds for essential research to enhance your teaching needs. Projects will include: Acoustics in classrooms; EAL; Deafness and autism

We need your help to make this venture a success.

BATOD Foundation

BATOD Regional meetings

July
5 **BATOD Wales**
Assessment tool for room acoustics and the NDCS strategy for healthy minds
Llangoed Hall, Powys

October
13 **BATOD North**
Audiological Competencies: Making a difference Venue: Chorley PR7 1QR

TBA **BATOD Midland Conference & AGM**
Down Syndrome/BAHAs/conductive loss

November
6 **BATOD Scotland**
Conference and AGM
Venue: Ramada Jarvis, Perth

have you registered yet?

On your first visit you need:

1. your BATOD membership number (it is on the label on the Magazine mailing)
2. the post code your magazine comes to
3. an email address that you will need to quote when you log in each time.

Click REGISTER and follow the instructions.
The site will send you a password that you will need next time you log on (you can change it then!)

On your next and subsequent visits you need:

1. the email address
2. your password.

Click LOGON and you are able to access the members' information.

European partnership

Paul Simpson throws some light on BATOD's involvement in a project exploring competencies needed by Teachers of the Deaf across Europe

Readers of this Magazine will be aware that for some time BATOD has been involved in a European project. Before his untimely death, Andrew Broughton put untold hours of work into a robust, detailed and convincing bid for funding from the European Union's Leonardo da Vinci fund. This fund is concerned with a wide range of objectives which broadly fit into the category of 'vocational training', but the key to a successful bid is to link it to the issue of social exclusion. The bid was able to show that the project, were it successful, would increase the social inclusion of deaf children.

The topic chosen related to the development of competencies for Teachers of the Deaf across Europe. The bid had five partners – the co-ordinating partner, the Telford and Wrekin local authority, Mary Hare/Oxford Brookes, also from the UK, the University of Leuven in Belgium, the University of Malta and FEAPDA (Fédération Européenne d'Associations de Professeurs de Déficients Auditifs), the European Federation of Associations of Teachers of the Deaf. BATOD is a key member of FEAPDA, being the biggest member association, and is therefore much involved in the project. Being President of FEAPDA and Executive Officer of BATOD has meant that I represent the two bodies in this project.

The first meeting was quite small and was held in Telford in November 2009. During the two days, one or two representatives from each partner organisation discussed the principles of the project as well as the practicalities, looking at the most beneficial way of spending the time and the funding allocated to the project. Any project of this nature has to be carefully evidenced and it was clear that the first task was to review the current situation across the participating countries with regard to key aspects of the education of the deaf.

It was at this point that we first saw how complex such projects are. The prime purpose of any such project is to facilitate European partnership, collaboration and co-operation. To this end the key evidence which has to be provided to demonstrate this is in the form of what the EU calls 'mobilities'. A mobility is a journey from one partner country to another and back again and the proof of ticket or boarding card has to be provided or the mobility will be discounted. The funding coming with the project covers travel, accommodation, subsistence and other project-related expenditure but the principal evidence to be provided and receipts to be kept relate to the mobilities. Each partner is allocated a number of mobilities – failure to have used up the allocated number (24 over two years for FEAPDA) leads to funding having to be returned (whether or not it has been spent!). FEAPDA presented a huge logistical problem. The geographical base of the federation is in Luxembourg (one reason the title is in French – the official language of Luxembourg) but there are very few Luxembourgish Teachers of the Deaf and certainly few would be involved in this project. I, as the principal representative, don't live in Luxembourg. Hard to believe though it is, at one time it would seem that, technically, in order to gain any mobilities I would have to go from my home in Rochester, south east of London, to Luxembourg to fly out to another country and then, after the event, fly back to Luxembourg before returning to the UK! The manager of the project from the Luxembourg agency had never met such a situation – previous partners in projects had been single Luxembourg-based organisations or institutions.

Members of FEAPDA come from a wide range of European countries including Sweden, Switzerland, Germany, Italy, Poland, Belgium, the Netherlands and the UK. Common sense prevailed, however, and it was agreed that bona fide members of FEAPDA could indeed take part – and not starting from Luxembourg – as long as they went from their country to one of the four partner countries: UK, Belgium, Malta and Luxembourg. Each meeting is held in one of those four countries. So colleagues can go from Italy to Luxembourg and back and that counts as one mobility. Unfortunately any visit from me to a UK partner doesn't count.

We had decided to explore two strands – the qualifications of Teachers of the Deaf and the

prevalence of deafness in the partner countries. Both these issues presented significant and in some ways unexpected difficulties – in some countries there was very little data at all. Polish colleagues wrote to seven different agencies and government bodies and received no information – there were replies but only saying that the information was not available. Other countries could only find very little information. This did not discourage us, however, as this in itself is evidence of need and of the lack of knowledge on which to base judgements on such matters as numbers of Teachers of the Deaf.

However, from the available statistics the figure was found to be between one and two per 1,000 rising from around one at birth to around two at the age of nine years.

Similarly, the professional background and way of working of Teachers of the Deaf across the countries varied considerably so that it was difficult to make meaningful comparisons. For example, in some countries aspects of the work carried out by Teachers of the Deaf in the UK are carried out by other professionals – such as support to pre-school children, or hearing aid support.

These findings and statistics were discussed at the second meeting which took place in early March in Luxembourg. In a comfortable Franciscan retreat house and conference venue which provides good quality accommodation, food and meeting facilities at a very reasonable rate, 13 people gathered from all the partner countries, including the Netherlands and Italy, on FEAPDA's behalf (four FEAPDA mobilities thus being achieved). The meeting lasted the best part of two days and we first discussed the facts relating to prevalence and Teachers of the Deaf in the different countries, deciding to follow up a number of leads and to attempt to clarify some ambiguities. We then addressed the meat of the meeting – to get to grips with competencies for Teachers of the Deaf which would form the basis of a consultation document we hoped eventually to circulate to those involved in the project across Europe.

Ably guided by Sue Lewis, we looked at a wealth of competencies based on the English Training and Development Agency's training specification for Teachers of the Deaf and broke them down into different groups – knowledge and understanding (eg how language develops), professional skills (eg facilitating language development) and professional attributes (working with other colleagues and parents when using this knowledge and those skills). We split into groups and made our choices which were then the subject of further discussion. We then divided into further groups looking at audiology/technology, professional teaching skills, assessment and language development and tried to determine where we thought the gaps were, with the aim of creating a comprehensive list of competencies for Teachers of the Deaf. Eventually we decided to narrow down our consideration and initially work on one area.

It was clear after our many stimulating discussions that a lot more work still needed to be done so Graham Groves, the co-ordinator from Telford and Wrekin, undertook to produce a consolidation of our thinking as an initial document to be shared with other colleagues not involved in the project to get an idea of whether or not we were on the right track. Other colleagues were allocated other tasks to be carried out before the next meetings in April in Belgium and May in Malta. A further meeting in Newbury at Mary Hare School was arranged for September.

It is important that the competencies we put out to consultation are well thought through by the partners in the project. You may well have seen some advertisements in previous Magazines alerting members to the fact that this consultation will take place. We certainly hope to have it ready later in the year and warmly encourage everyone to respond, bringing to bear practical experience and knowledge of the work of a Teacher of the Deaf and the competencies required.

The intensive two-day meeting was tiring work but rewarding and by the end of it we felt that we had made a good start. We all fervently hoped that Andrew would have been pleased with the progress made.

Paul Simpson is the Executive Officer of BATOD.

What went on at NEC on 14 March 2010

After a hugely successful conference, members met the following day to discuss general BATOD business, as **Mary Ensor** reports

Gary Anderson, who took on the role of President at the AGM on Saturday 13 March, began his first meeting as chair of NEC by paying tribute to Peter Preston, BATOD Consultant and long-standing member of NEC, who died in December.

The meeting continued with introductions and a particular welcome to two new members on the committee, Jill Bussien and Kathy Owston. Gary encouraged all present – those well-established and those who have more recently arrived – to make their contributions to the meeting freely. He took the opportunity to thank all members for their contribution to the work of BATOD and to reiterate the purposes of the newly formed workstreams, established to help BATOD respond more proactively to the immediate issues of the day.

Bev McCracken, the Treasurer, once again highlighted the importance of the wise husbanding of BATOD's resources – one method would be to have fewer meetings requiring overnight stays. The consensus was that a London meeting, starting at 11am and going on until 5pm, meets most members' needs so we will try this for the June NEC meeting. Bev was warmly thanked for the extensive work he does in arranging all NEC and steering group meetings – members were encouraged always to respond to his emails.

There was a brief discussion about the possibility of weekday meetings of the NEC as such a change has been successful in some of the regions and nations for their meetings. However, quite a few members said they could not get time off and those from more far-flung areas would find it difficult to attend.

Before lunch we were joined by Rosie Sheridan of Maney, the new publisher of the Journal, who gave a presentation and answered questions. The response to the exciting new cover of the first Maney edition has been very positive. It was agreed that we could explore some themes which could appear in their different forms in both the Magazine and Journal at similar times, as has occasionally been done in the past. Rosie stressed the importance of the international profile and Maney will be attending the International Congress on the Education of the Deaf in Vancouver in the summer, as well as other international events.

The rest of the morning was spent in individual workstream meetings. After lunch we considered Association business. There were warm congratulations to Ann Underwood and Mary Fortune and their 'team' for a successful conference the previous day. Gary was especially pleased that 70 delegates came back for the plenary session at the end of the day. Ann in turn asked that BATOD expressed its warmest thanks to Judy Halden who worked with Ann as the speech and language therapists' 'representative'. Evaluation sheets were very positive – the workshops were well appreciated, of high quality, motivating and varied. The only suggested change was that some delegates would have preferred a fixed, and longer, period of time for lunch.

The workshops were well appreciated, of high quality, motivating and varied

Gary started his report with renewed thanks to Ann for her two years' in office. His theme will be 'stronger together'. He believes we need to forge even stronger links with other professionals and organisations. He welcomed the resurgence of the South West region and the development of the East region. He reiterated his call made in his previous day's presidential address for each member of BATOD to try to persuade another person to join.

Paul Simpson's last Secretarial report (as his title has now changed to Executive Officer following the AGM) touched on some of his recent activities such as NatSIP, attending meetings at the GTC(E), Ofqual and his work on the Leonardo project (see his article in the Magazine on page 44). It was decided that Paul's new email address should be exec@batod.org.uk. The old address will, of course, continue to work.

We had a series of reports from the regions and nations – some of whose committees are struggling to find personnel for their various posts. Gary said that the NEC needed to be alerted well in advance if any regions or nations were experiencing difficulty so that support could be put in place.

Regional meetings were well attended – some heads of services were allowing colleagues out on a weekday and some regions were having to turn people away. Gary asked regions for dates when he could visit, as it is traditional for the President to visit each region and nation during his or her term of office.

Each workstream had met during the morning and Gary asked each leader to feed back a couple of items to share with the whole NEC. The Policy and Practice workstream is organising a survey to find out more about different types of service organisation and it is going to analyse the Lamb Inquiry report for implications for services.

The theme of next year's conference, to be held in Newcastle, is to be 'Stronger together'

The Business and Administration workstream had worked on proposed dates for the next two years' meetings of the Steering Group and NEC which will be circulated. It will also be seeking the views of NEC members on the Magazine and the website.

CPD told the meeting that its proposal for a Teachers TV programme highlighting the need for Teachers of the Deaf was rejected. The workstream has decided that the theme of next year's Conference, to be held in Newcastle, is to be 'Stronger together'. There was a discussion about the best days for the annual event.

David Couch reported that the Quality Standards group had prepared a questionnaire to evaluate the quality of outcomes from CHSWGs from the education perspective. Two issues of particular interest are statistics on DNAs ('did not attends') and hearing aid reviews. The British Society of Audiology has also been asked to develop its own questionnaire to ask health colleagues about aspects of the education service. Paul reported on some of the meetings he and others have attended, including the Disabled Teachers' Task Force. Skill, the association for students with disabilities, is seeking teaching ambassadors – teachers with a disability who are happy to discuss their situation with students.

We also discussed the Peter Preston Award. More information is to be found elsewhere in the Magazine on page 6.

David Couch is the next Chair of Hearing and Balance UK. This is a forum for discussing a range of items and includes representatives from both health and education. One issue has been ear mould impressions being made by ToDs and how to develop a national approach to this. David would welcome any suggestions for topics spanning health and education issues which could be raised at future meetings.

There is now a vacancy for Consultant following Peter's death. Suggestions for people to perform this role were requested. A job description is already on the members' area of the website.

As is traditional at the NEC meeting following the Conference (the only one held on a Sunday) we finished early so that members from all over the UK could return home, tired after a busy weekend, but pleased that such lot of useful work had been carried out.

Mary Ensor is a member of the Policy and Practice workstream of the BATOD NEC.

Moved? Married? Missing magazine?

All members are reminded that the Membership Secretary MUST be notified of any change of address to ensure that labels are changed and Magazines and Journals reach you.

Name	*changed to:*
Address	*changed to:*
post code	*post code:*
membership number	*email:*
telephone	

Please send this information to BATOD Membership Secretary
112 Deas Avenue, Dingwall, Ross-shire IV15 9RJ

email: membership@BATOD.org.uk


PHONAK

A message from the Membership Secretary

Let me introduce myself: I am Fiona Mackenzie, a Teacher of the Deaf in the Highland region of Scotland. I took over the role of Membership Secretary in 2004. Since then I have been organising and reorganising the BATOD membership database. Some of you, like me, joined BATOD many, many years ago and as times change, details change and the way we communicate changes too!

Some of you may have had contact with me recently about updating your details, and I thank you all for helping me to keep the database current. However, there is still a lot of information required. All I am asking is for you to find the time to email me at: membership@BATOD.org.uk so that I can contact you for any details outstanding and at the same time update or add your email address to the database.

Missing members...
I am trying to trace the following members:
LH Deighton, Liverpool
NR Foster, Erith
JC Holdsworth, Hemel Hempstead
JM O'Connell, Cambridge
LM Parrish, Leeds
CM Peake, Clwyd
S Pierce, Westcliffe on Sea
W Schneider, Buxton
D Scott, Selkirk
S Smithson, Salisbury
N Storey, Bradford
AJ Thring, Croydon
LM Warden, Lanivet
LM Williams, Highgate

If you are one of these members, or you are able to contact them, please email me at membership@BATOD.co.uk. Thank you in advance for your help.

Fiona Mackenzie.

Please note: BATOD does not distribute information from the database to any other body. The full database is kept by the Membership Secretary only. Parts of the database are kept by the Treasurer, the Executive Officer, the Webmaster and temporarily by the Conference Organiser.

BATOD was there representing you...

Between the NEC meetings, members of BATOD attend various meetings that are of particular interest to Teachers of the Deaf. This list is not exhaustive. Your representatives at the meetings listed included: David Couch, Derek Heppenstall, Paul Simpson, Ann Underwood.

Date	External participants	Purpose of meeting	Venue
March			
1	NatSIP	Outcomes group	Sense, London
1	DESF	Regular meeting	RNID, London
2	Hearing and Balance UK	Regular meeting	London
4	UKCoD/Advanced Technologies	Conference	London
6	FEAPDA	Regular committee meeting	Luxembourg
7–8	Leonardo project	Second partnership meeting	Luxembourg
9	GTC(E)	Disabled Teachers' Task Force	GTC(E), London
9	QCDA	Functional Skills conference	London
11	UKCoD	Planning for the future	RNID, London
17	NatSIP	Third working day	tbc
22	AAQAG	Regular meeting about access to examinations	Cardiff
29	GTC(E)	Subject Specialists Association	London
April			
21	Ofqual	Modification of examination language	Coventry
29–30	Leonardo project	Third partnership meeting	Leuven, Belgium
May			
11	NatSIP	Reference group	Sense, London
24–25	Leonardo project	Fourth partnership meeting	University of Malta

ICT news

Keen to expand her pupils' ICT knowledge and get them using computers for creative projects, Sharon Pointeer explores the world of cutting machines

For many years the GCSE ICT syllabus has required pupils to know about a huge range of computer input, output and storage devices. While most of these, such as keyboard, mouse, monitor, speaker, scanner and so on, fall within pupils' direct experience, some do not and, as we all know, pupils understand and remember things much better if they can see them and use them themselves.

One such device is a plotter or, to give it its proper name, a graph plotter. Graph plotters traditionally are used in the design industry to create, often on a large scale, drawings such as architects' plans. These sophisticated printers use coloured pens physically to draw out the design on paper. The drawings they produce are extremely accurate and can be very complex. At one time some hearing aid test boxes had a built-in plotter which drew out the trace with a tiny pen, so you may well have seen a miniature plotter in action. It used to be possible to purchase a small plotter for use in a school for demonstration and design work. I have collected several, but pens and spare parts have now become almost impossible to acquire. Over the years plotters have been replaced by high quality laser printers and only very specialised companies now make use of plotters. The ones they use are large scale, maybe A2 or A1 size, and extremely expensive, so unless you can organise a visit, it is very difficult for pupils to see one in action.

For the past few years I have used a vinyl cutting machine to demonstrate the principles of a plotter. Professional sign-makers use these machines for creating their signage products. The vinyl cutter works in the same way as a plotter in that the device 'draws' the design on to a thin self-adhesive vinyl sheet using a blade. The finished design can then be peeled off and stuck on to another surface. You could make a cut-out logo for the side of the minibus or lettering for a door. Most of these cutters will also take a pen, so designs can be drawn out. We have recently upgraded our computers, so my parallel port vinyl cutter could no longer be used. There is no parallel port on the new computers and the software for the cutter will not cope with an adaptor.

Initially I started my search for a replacement looking for an equivalent USB-driven machine. The starting point was therefore TechSoft and the Stika machine. While I could replace like with like I discovered that in order to use the machine on a Mac I needed to be using *Adobe Illustrator*. It soon became clear that I would be paying many times more for the software site licence than for the machine! I decided to widen my search.

I soon discovered that a new style of plotter has appeared on the market. Amazingly this is not aimed at companies or even schools, but at crafters. The new gadgets, often referred to as personal cutting machines, are designed to cut paper and card for scrapbooking and card making. Most will also cut other materials, such as self-adhesive vinyl and labels, thin fabric, transfer paper and thick card. This immediately appealed more than the Stika cutter which is designed for self-adhesive vinyl only.

The entry level versions of these machines take cartridges which store lettering or graphics which can be cut out in a variety of sizes and then stuck on to, for example, a birthday card. The user is able to set the speed and depth of cut depending on the material being cut and then it is just a question of pressing the go button to start the machine cutting. There are many different cartridges available, but once you start to buy these the cost will soon mount up.

Some of the cartridge-based machines, but not all, will also link to a computer and, with additional software, cut designs which have been created on the screen. They connect using a USB cable and the design possibilities are greater, with the ability to overlap letters and shapes within the software. One manufacturer has even created a handheld device to which the cutter can be connected which contains the software to combine and overlap letters and shapes from the cartridges without the need for a computer.

There are also machines which do not take cartridges at all and require connection to a computer or insertion of an SD (secure digital) card to download the designs.

Usually the material to be cut is applied to a sticky cutting mat which holds it in place during the cut. Sizes vary from around A5 to A4, although there are some which will take paper up to 12" by 24". It is also possible to buy a pen to replace the blade, thus turning the machine into a plotter.

Brands to look out for are Xyron, Cricut, Graphtec, Pazzles and Craftwell. After a lot of searching and deliberation I chose the Cricut Expression with the *Sure Cuts A Lot* software. This seemed to represent the best value and greatest flexibility for use in school. It was supplied with my choice of three cartridges and all the necessary cutting mats and blades I required to get started. My first use was to cut out thought bubbles for a wall display, something which would have taken ages by hand and then would not have looked as neat and accurate as when done on the machine. I am looking forward to thinking up design projects for the pupils and perhaps, nearer Christmas, running a card-making club.

Websites

www.xyron.com – Xyron makes two different cutting machines. The Personal Cutting Machine takes cartridges and is readily available in the UK, from craft shops such as Hobbycraft. The machine originally retailed at £150, but can now be found for around £60 with cartridges costing £15 upwards. There is no option to connect to a computer, however, and the largest size paper on which it can cut is 4” by 4”. Xyron claims that ‘If you can wish it – you can cut it with the Xyron Wishblade.’ The machine is supplied with both PC and Mac software which has a host of features. The American website has videos, projects and an online community and you can purchase and download shapes and card layouts to use with the machine. The shapes are in a variety of file formats, so even if you do not have a Xyron machine it is worth looking at its downloads section.

www.cricut.com – The Cricut machines are made by Provo Craft which makes a range of crafting machines. It has three varieties of cutting machine which take cartridges and can also be computer driven. The Personal Electronic Cutter Machine (£150) cuts on material up to 5”. The next size up is the Cricut Create (£215) which cuts on a 6” by 12” mat. This machine has more built-in features, such as the ability to fit a design to the page, ie cut it as large as possible, flip for mirroring work and fill mode for multiple cuts of the same design. The largest machine is the Cricut Expression (£250) which cuts on a 12” by 12” or a 12” by 24” mat. All the machines come complete with one cartridge containing a fairly standard font and a few basic shapes. The Cricut Design Studio Software is an optional extra and is PC only and adds additional functionality to the cartridges you own, such as the ability to weld fonts together. The company also makes the Cricut Gypsy which is a handheld device on to which you load your cartridges so that you can manipulate the designs, using the built-in software, without the need for a computer.

www.craftedge.com – If you want to create your own designs for your Cricut using drawing software and the fonts on your computer, then you need to buy the *Sure Cuts A Lot* software from Craft Edge. This is available for PC and Mac as a download and works with all the Cricut machines. No special cartridges are required and you can import SVG files or jpegs easily. It is extremely easy to use and costs just under £50. The company also does extremely good deals for educational licences.

www.pazzles.com – Pazzles Creative Cutter Inspiration is designed to give the convenience of pre-made images with the flexibility of creating your own designs. The cutter retails at around £399 in the UK and includes PC software. The website has projects and a library of images for downloading, videos showing hints and tips, a shop and an online community where you can share ideas and chat with other designers.

www.graphtecgb.com – The Craft ROBO from Graphtec uses an SD card from which it can read and cut designs. You can also use the optional PC software to create your own designs. It pays to shop around, as some retailers offer free CD-ROMs containing hundreds of templates as part of the package. Prices start at around £120 for the Lite model and around £220 for the Standard model. The company also sells more expensive, larger models for use in commercial environments.

www.craftwellusa.com – The latest machine to hit the market is the Craftwell eCraft. This is another cartridge-free machine whose main selling point is its unique design and paper feeder system, making it easy to cut materials automatically, without the use of a cutting mat or the need for manual adjustments. The basic machine will accept material up to 12” wide and any length, although there will be a 30”-wide version. Designs can be loaded on to an SD card for cutting or the machine can be connected to your computer. At the time of writing this article the Craftwell website was showing that the software is coming soon, initially for PC, with a Mac version later. There will even be an Apple app for that! The machine will retail in the UK starting at £239, which should include spare blades, pens and software.

Cutting machines are stocked in the UK by a number of UK craft suppliers, including Smart Crafts (www.smartcrafts.co.uk), Oyster Stamps (www.oysterstamps.co.uk) and A & H Crafts (www.aandhcrafts.co.uk).

If you would like to contribute anything to these pages, please contact Sharon Pointeer at ICTNewspage@BATOD.org.uk.

This and that...

Email news to this-n-that@BATOD.org.uk

Eichholz Prize for excellence

The 2009 Eichholz Prize was awarded to two students, Louize Miller and Alison Bruce. Throughout her studies for the Postgraduate Diploma in Hearing Impairment, Louize has demonstrated a commitment, enthusiasm and thirst for knowledge that bodes well for her future as a Teacher of the Deaf. Her academic work has been uniformly of the highest calibre across all modules of the course and she has demonstrated a good sense of humour, flexibility and a huge capacity for work. Louize is pictured receiving her award during the BATOD AGM. The other recipient, Alison Bruce, will be presented with her award at a BATOD Scotland meeting in the future. Alison had an overall grade of 72% on the Postgraduate Diploma at Moray House. Her final project was an investigation into what deaf secondary pupils think about inclusion in a mainstream and a resource unit setting.

Secure future for Frank Barnes

Readers will have followed over recent months and years the concerns over the future of Frank Barnes School for Deaf children. On 9 March the school announced that its future had been secured following the signing of an agreement between the school and the London Borough of Camden. The agreement promises continued support for the school and the construction of state-of-the-art facilities in King's Cross by the start of the 2013/14 academic year.

Frank Barnes School will move to a temporary site at Jubilee Waterside Centre while the new school is built as part of the King's Cross Development. The borough guaranteed its continued support of the school by the funding and development of a ten-year strategy for the education of deaf children.

New MSI children's curriculum published

A new specialist curriculum guidebook is set to improve how deafblind and multi-sensory impaired (MSI) pupils learn how to learn.

Published with support from the national deafblind charity, Sense, *A Curriculum for Multi-Sensory-Impaired Children* is written by Dr Heather Murdoch who worked for two years with specialist staff at the MSI unit at Birmingham's Victoria School to develop the curriculum. It emphasises how teaching and learning are presented and developed and details how concepts need to be presented over and over again in ways that children with MSI can understand, because they usually cannot learn incidentally or without specific support. This approach gives the flexibility required by the very wide range of needs associated with MSI.

Free assistive technology where it's needed most!

By now most people in education will have heard all about the Home Access programme but some may not be aware that this offering includes a whole range of assistive technology solutions.

Home Access packages are designed to be inclusive and are built with every child's needs in mind, including those who may need assistive technology support. Offering a range of solutions for children with physical, sensory and profound needs, assistive technology packages consist of:

- a suite of assistive technology software which comes pre-loaded on every device and consists of TextHelp's *Read&Write*, Matchware's *Mindview* and *iZoom* programs
- assistive technology package 1, which provides vital hardware such as adapted mice, adapted keyboards and keyboard stickers
- assistive technology package 2, which is tailor-made to each child's needs and is for those children with more physical, sensory or profound special educational needs.

The assistive technology software and assistive technology package 1 solutions are available now and are already providing benefit to many children.

Families who meet the eligibility criteria are encouraged to apply immediately for assistive technology package 2 to ensure that their needs are met and adequate funding is allocated. Initial evaluations are taking place now for delivery of assistive technology solutions in summer 2010 so please encourage applicants to send in their forms as soon as possible.

Home Access is the government programme that aims to give children in state-maintained education in England access to technology at home to support learning by providing them with grant funding to buy a computer and/or internet package. The Home Access programme began its phased roll-out in January 2010. Initially the programme will target children in Years 3 to 9 and aims to benefit more than 270,000 households by March 2011. To find out more visit www.homeaccess.org.uk/

Abbreviations and acronyms used in this Magazine

AAQAG	Access to Assessment and Qualifications Advisory Group
ACE	Assessment of Comprehension and Expression
AGM	Annual General Meeting
ANSD	Auditory Neuropathy Spectrum Disorder
APD	Auditory Processing Disorder
ATOD	Advisory Teacher of the Deaf
AVT	Auditory Verbal Therapist
BAHA	Bone-Anchored Hearing Aid
BAN	Body Area Network
BATOD	British Association of Teachers of the Deaf
Becta	British Educational & Communications Technology Agency
BEd	Bachelor of Education
BSA	British Society of Audiology
BSL	British Sign Language
BSLBT	British Sign Language Broadcasting Trust
BUPA	Medical Insurance company
CD-ROM	Compact Disk-Read Only Memory
CHSWG	Children's Hearing Services Working Group
CI	Cochlear Implant
CIP	Cochlear Implant Programme
CPD	Continuing Professional Development
CRIDE	Consortium for Research in Deaf Education
DAI	Direct Audio Input
dB	Decibel
dBHL	Decibel Hearing Level
DCAL	Deafness Cognition and Language Research Centre
DCSF	Department for Children, Schools and Families
DEI	Deafness and Education International
DESF	Deaf Educational Support Forum
DfES	Department for Education and Skills
DH	Department of Health
DI	Deaf Instructor
DNA	Did Not Attend
DVD	Digital Versatile Disk
ECM	Every Child Matters
ENT	Ear, Nose and Throat
ERADE	Exeter Royal Academy for Deaf Education
EU	European Union
FE	Further Education
FEAPDA	Fédération Européenne d'Associations de Professeurs de Déficients Auditifs (European Federation of Associations of Teachers of the Deaf)
FM	Frequency Modulation (radio)
fMRI	functional Magnetic Resonance Imaging
GCSE	General Certificate of Secondary Education
GTC(E)	General Teaching Council (for England)
HI	Hearing-Impaired or Hearing Impairment
HST	Hearing Support Team
ICT	Information and Communication Technology
IEP	Individual Education Plan
IQ	Intelligence Quotient
ISVR	Institute of Sound and Vibration Research
IT	Information Technology
Jpeg	Joint Photographic Experts Group
KS	Key Stage
LA	Local Authority
LAN	Local Area Network
Mac	Macintosh
MDT	Multi-Disciplinary Team
MORE	Maney Online Research E-Journals
MP	Member of Parliament
MRC	Medical Research Council
MSI	Multi-Sensory Impairment
NatSIP	National Sensory Impairment Partnership
NDCS	National Deaf Children's Society
NEC	National Executive Council
NHS	National Health Service
NHSP	Newborn Hearing Screening Programme
NICE	National Institute for Health and Clinical Excellence
OAE	Otoacoustic Emissions
Ofqual	Office of the Qualifications and Examinations Regulator
Ofsted	Inspectorate
PC	Personal Computer
PCT	Primary Care Trust
PDF	Portable Digital Format
PIPS	Performance Indicators in Primary School
PSHE	Personal, Social and Health Education
PUD	Personal Understanding of Deafness
QCDA	Qualifications and Curriculum Development Agency
QS	Quality Standard
RAPA	Recent Advances in Paediatric Audiology
RCSLT	Royal College of Speech and Language Therapists
RNIB	Royal National Institute of Blind People
RNID	Royal National Institute for Deaf People
Sat Nav	Satellite Navigation
SCS	Sensory Consortium Service
SD	Secure Digital
SEN	Special Educational Needs
SENJIT	Special Educational Needs Joint Initiative for Training
Sense	National charity for people with deafblindness
Skill	National Bureau for Students with Disabilities
SLCF	Speech, Language and Communication Framework
SLI	Specific Language Impairment
SLT; S&LT	Speech and Language Therapist
S/N	Signal-to-Noise
SOAS	School of Oriental and African Studies
SOECIC	South of England Cochlear Implant Centre
SVG	Scalable Vector Graphics
TA	Teaching Assistant
TBC	To Be Confirmed
TDA	Training and Development Agency
THRASS	Teaching Handwriting Reading and Spelling Skills
ToD	Teacher of the Deaf
ToM	Theory of Mind
TV	Television
UCL	University College, London
UK	United Kingdom
UKCoD	United Kingdom Council on Deafness
USB	Universal Serial Bus
VI	Visually Impaired or Visual Impairment
VIEW	Visual Impairment: Education and Welfare: professional association for teachers of visually impaired children

If you have found an acronym in the Magazine that isn't explained in this list, then use www.acronymfinder.com to help you to work it out.

BATOD membership

BATOD activities are funded from your membership fee and some advertising income. Colleagues who share your Magazine and Journal also benefit from BATOD negotiations with government and other influential bodies - but they are not contributing! Persuade your colleagues to join BATOD.

Type	Who	Benefits
Full	Those who hold a recognised qualification as a Teacher of the Deaf	5 Magazines and 4 Journals annually Access to members' area of website Discounted conference fees **Voting rights** 50% subscription for unwaged
Associate	Those other than qualified Teachers of the Deaf (includes teachers undertaking ToD training; S&LT, teachers, social workers, parents)	5 Magazines and 4 Journals annually Access to members' area of website 50% subscription for unwaged Discounted conference fees No voting rights
Special	Those working with deaf pupils in a support position eg LSAs, CSWs, TAs	5 Magazines annually Access to members' area of website Discounted conference fees No voting rights
Retired	Members who have retired from paid employment may choose this category of membership	5 Magazines and 4 Journals annually Access to members' area of website Discounted conference fees No voting rights

- Retired members who do not wish to receive the Journal should contact the Membership Secretary and arrange a reduced rate.
- Retired members who return to paid employment should inform the Membership Secretary of their changed circumstances.
- Current Full and Associate members who are entitled to a reduced subscription should notify the Membership Secretary of their circumstances by 30 June for the following year's membership, to enable the necessary paperwork to be completed.
- Members with a change in circumstance or personal details should inform the Membership Secretary as soon as possible.
- Those who live outside of the UK are eligible for overseas membership. Please contact the membership secretary for details

Membership subscription rates

due 1 August 2010

Our financial year runs from August to July. Cheque payers will be sent a reminder about payment in June. Direct debits will be altered automatically for payments in August and beyond.

	Annual Direct Debit	Quarterly Direct Debit	Cheque
Full members in employment	**£ 70.00**	**£ 18.30**	**£ 75.00**
Associate members in employment	£ 70.00	£ 18.30	£ 75.00
Full members taking a career break	**£ 35.00**	**£ 9.15**	**£ 37.50**
Associate members – unwaged	£ 35.00	£ 9.15	£ 37.50
Retired members	**£ 35.00**	**£ 9.15**	**£ 37.50**
Special members	£ 26.00		£ 26.00

The BATOD Treasurer may be contacted via treasurer@BATOD.org.uk

Meetings and training Calendar

This page is an extract from the Calendar to be found on the BATOD website. Please note that it is not exhaustive. Items noted on this Calendar may have been advertised within the Magazine or the information reported by telephone. BATOD is not necessarily the organising body.

Please contact the organising body (column 2) for details of conferences, *not* the Editor of this Magazine.

Date May	Organisation	Meeting topic	Venue
21	The Ear Foundation	Sharpening your Counselling Skills – all professionals working with deaf children	The Ear Foundation, Nottingham NG7 2FB
21	Auditory Verbal^{UK}	'Are you thinking what I'm thinking?' Facilitating Social and Emotional Development in Children with Hearing Impairment	AVUK, Bignell Park Barns, Chesterton, Bicester OX26 1TD
22	BATOD and Oak Lodge School	Mind over Matter	Oak Lodge School SW12 8NA
25	The Ear Foundation	Working with CI and Ethnic Minority Families – all professionals working with ethnic minority children and families	The Ear Foundation, Nottingham NG7 2FB
26	SOECIC	Cochlear Implant Training Course Part 1 – Referral to Implant (see link professionals, training)	University of Southampton
26–27	nasen	nasen Live 2010	Reebok Stadium, Bolton
27	The Ear Foundation	Working in Sign-bilingual Settings – all professionals working with deaf children	The Ear Foundation, Nottingham NG7 2FB
28	The Ear Foundation	Routes to Literacy – Teachers of the Deaf, speech and language therapists, learning support assistants	The Ear Foundation, Nottingham NG7 2FB
June			
3	Mary Hare Training Services	BSA Certificate in Otoscopy & Impression Taking (Paediatric)	Newbury
8–10	NHS 2010	Beyond Newborn Hearing Screening: Infant and Childhood Hearing in Science and Clinical Practice	Villa Erba Congress Center, Cernobbio, Italy
8	The Ear Foundation	Listening with the Third Ear – Counselling skills for clinicians – with Kris English – audiologists, clinical scientists	The Ear Foundation, Nottingham NG7 2FB
11	British Association of Paediatricians in Audiology	Annual London Conference	SOAS, Brunei Gallery, Russell Square
12	BATOD NEC	Association business	TBC
13	SOECIC	An Introduction to Auditory Processing Disorder (APD) (see link professionals, training)	University of Southampton
15	Mary Hare Training Services	The Analytical Writing Assessment – Deaf Children's Literacy	Newbury
15	Mary Hare Training Services	BSA Certificate in Industrial Audiometry	Newbury
16	The Ear Foundation	Cochlear workshop: Baha Information Day – all professionals interested in Baha Technology	The Ear Foundation, Nottingham NG7 2FB
17	The Ear Foundation	Children with Cochlear Implants: The Pre-school Years – all professionals working with children with CI	The Howardian Centre, Cardiff
21	The Ear Foundation	Troubleshooting Cochlear Implants: including FM systems	The Ear Foundation, Nottingham NG7 2FB
22	SOECIC	Cochlear Implant Training Course Part 2 – Progress and Outcomes (see link professionals, training)	University of Southampton
22	Mary Hare Training Services	Transitions for Deaf Children and Young People	Newbury
29	The Ear Foundation	Troubleshooting Cochlear Implants including FM Systems – all professionals working with children with CI	Exeter Royal Academy for Deaf Education
July			
1	The Ear Foundation	SNAP: Story Narrative Assessment Procedure – Teachers of the Deaf, speech and language therapists	The Ear Foundation, Nottingham NG7 2FB
5	BATOD Wales	Assessment tool for room acoustics and the NDCS strategy for healthy minds	Llangoed Hall, Powys
6	The Ear Foundation	PALS: Profile of Actual Linguistic Skills – Teachers of the Deaf, speech and language therapists	The Ear Foundation, Nottingham NG7 2FB
8–9	The Ear Foundation	The Reynell Developmental Language Scales (RDLS) Version 3 – Teachers of the Deaf, speech and language therapists	The Ear Foundation, Nottingham NG7 2FB
12	SOECIC	An Introduction to Auditory Neuropathy Spectrum Disorder (ANSD) (see link professionals, training)	University of Southampton

The Calendar on the BATOD website is edited as soon as we know about meetings.
Additional information about courses and registration forms may also be linked to the calendar entries.

Officers of Nations and Regions
BATOD contacts and Magazine Distribution

Northern Ireland
Chairperson: Wendy Martin, 15 Ballyholme Esplanade, Bangor, County Down BT20 5LZ
Secretary: Heather Lammey, 45 The Oaks, Newtownards, County Down BT23 8GZ
Treasurer: Antonette Burns, 39 Wynchurch Avenue, Rosetta, Belfast BT6 0JP

Scotland
Chairperson: Jean McAllister, 26 Willowdale Crescent, Glasgow G69 7NL
Secretary: Eleanor Hutchinson, Flat 6, Cow Wynd, Falkirk FK1 5EA
Treasurer: Anne Pack, 63 High Beveridgewell, Dunfermline, Fife KY12 9ER

Wales
Chairperson: Revolving post
Secretary: Marian Williams, 2 Woodview Terrace, Bryncoch, Neath SA10 7EQ
Treasurer: Rhian Gibbins, Rhianfa, 24c Forest Hill, Aberdulais, Neath SA10 8HD

East
Chairperson: Kathryn Cutmore, 29 Chapel Road, Tolleshunt D'Arcy, Maldon, Essex CM9 9TL
Secretary: Sara Brierton, 16 College Road, Impington, Cambridge CB24 9TD
Treasurer: Karen Taylor, CSSS, Woodside Road, Norwich NR7 9QL

Midland
Chairperson: Cate Latchford, Buxton House,The Row, All Stretton, Shropshire SY6 6JS
Secretary: Ursula Walker, 207 Bentley's Lane, Walsall WS2 8SP
Treasurer: Robert Miller, 13 Derby Close, Broughton Astley, Leicestershire LE9 6BE

North
Chairperson: Elaine Rayner, 25 Frosterley Drive, Great Lumley, Chester-le-Street, County Durham DH3 4SJ
Secretary: Trish Cope, 23 North Drive, High Legh, Knutsford, Cheshire WA16 6LX
Treasurer: Mary Fortune, 30 Alexandra Road, Stockton Heath, Warrington WA4 2UT

South
Chairperson: Mary Ensor, 9 Landrock Road, Crouch End, London N8 9H
Secretary: post vacant
Treasurer: Donald Allan, Freewaters Cottage, Freewaters Close, Ickleford, Hitchin, Hertfordshire SG5 3TQ

South West
Chairperson: Wanda Garner, 10 Ashleigh Road, Exmouth EX8 2JY
Joint Secretary: Hazel Sutherland, 8 Osney Crescent, Paignton, Devon TQ4 5EY;
Denise Tudor, Cliff Court, Cliff Road,Torquay TQ2 6RE
Treasurer: Beverley George, 8 Forder Heights, Plymouth PL6 5PZ

Articles, information and contributions for the **Association Magazine** should be sent to:

BATOD Executive Officer
Mr Paul Simpson
tel/fax 0845 6435181
email magazine@BATOD.org.uk

...as should Association information and general queries.

Advertisements for the **Association Magazine** should be sent to:

Mr Arnold Underwood
BATOD Publishing and Advertising
41 The Orchard
Leven, Beverley
East Yorkshire
HU17 5QA
tel/fax 01964 544243
email advertising@BATOD.org.uk

Full guidelines for submissions and abstracts of papers published in the Journal **'Deafness and Education International'** are to be found at www.maney.co.uk/instructions_for_authors/dei

Enquiries related to the Journal to:
Dr Linda Watson
email l.m.watson@bham.ac.uk

Manuscripts should be submitted online at www.editorialmanager.com/dei

BATOD Magazine distribution from:
The Seashell Trust, Stanley Road, Cheadle Hulme, Cheshire SK8 6RQ
Association Magazine ISSN 1366-0799
Published by The British Association of Teachers of the Deaf, 41 The Orchard, Leven, Beverley HU17 5QA
Printed by The Nuffield Press Ltd, 21 Nuffield Way, Ashville Trading Estate, Abingdon, Oxon OX14 1RL
Magazine Project Manager: Kath Mackrill

The NEW Connevans 2010 Catalogue is available now!

Contact us for your free copies today!

Product overview & evaluation

Full product details to help with ordering

Product feature comparison charts

Fully illustrated guide to audio input shoes

User case studies

Fantastic range of resources available FREE!

Practical solutions for everyday problems

Quantities of literature are available for distribution – please contact Customer Services

Connevans

Tel: 01737 247571   Minicom: 01737 243134   Fax: 01737 223475
Email: info@connevans.com   www.DeafEquipment.co.uk